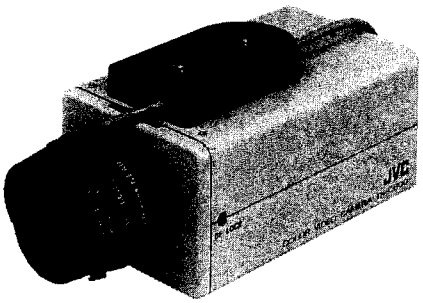
JVC

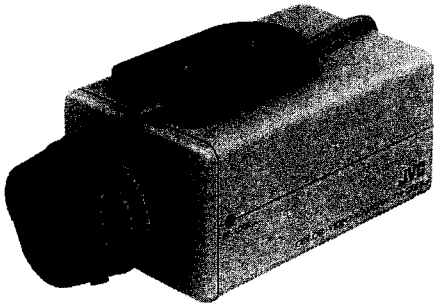
SERVICE MANUAL

COLOR VIDEO CAMERA

TK-C600/TK-C601EG



TK-C600
(Lens is optional.)



TK-C601
(Lens is optional.)

SPECIFICATIONS

Image sensor		: Color Video Camera
Signal system	TK-C600U	: Based on NTSC standard
	TK-C600E/601EG	: Based on PAL standard
Image sensor		: Interline-transfer CCD (with complementary color filter)
Number of effective pixels		
	TK-C600U	: 250,000 (512 (H) × 492 (V))
	TK-C600E/601EG	: 300,000 (512 (H) × 582 (V))
Image size		: 1/3 inch (pickup area: 4.8 (H) × 3.6 (V) mm)
Synchronization method		
	TK-C600U	: Internal and line lock synchronization (60-Hz regions only)
	TK-C600E/601EG	: Internal and line lock synchronization (50-Hz regions only)
Scanning lines		
	TK-C600U	: 525 lines, 2:1 interlaced
	TK-C600E/601EG	: 625 lines, 2:1 interlaced
Scanning frequency		
	TK-C600U	: (H)15.734 kHz (V)59.94 Hz
	TK-C600E/601EG	: (H)15.625 kHz (V)50.0 Hz
Resolution		: 330 TV lines (horizontal)
Video output		: Composite video signal 1Vp-p, 75 Ω, unbalanced
Video S/N ratio		: 46 dB
Minimum required illumination		: 1.5 lx (F1.2)
Switching functions		: AGC (ON/OFF), BLC (ON/OFF, Sync (INT/LL), White balance (Auto/Manu)
Adjusting functions		: Flange-back, Manual white balance (1 axes: R-B), V phase, IRIS LEVEL Control
Lens mount		: C/CS mount
Power supply	TK-C600U	: 24 V AC, 50/60 Hz
	TK-C600E	: 24 V AC, 50/60 Hz, 12 V DC
	TK-C601EG	: 220 V to 240 V AC 50/60 Hz
Power consumption		
	TK-C600U	: 4 W
	TK-C600E	: 4 W
	TK-C601EG	: 4.5 W
Operating temperature range		: −10°C to +50°C (Recommended temperature range: 0°C to +40°C)
Weight	TK-C600U	: 470 g
	TK-C600E	: 470 g
	TK-C601EG	: 800 g
Provided accessory		: 4P plug .....× 1

Design and specifications are subject to change without notice.

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No. 6661
DEC. 1994

MC-Service

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Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

● Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the ⚠ symbol and shaded (▒) parts are critical for safety.
   Replace only with specified part numbers.
   Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Fuse replacement caution notice.
   Caution for continued protection against fire hazard.
   Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers
   4) Insulation sheets for transistors
   5) Barrier

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

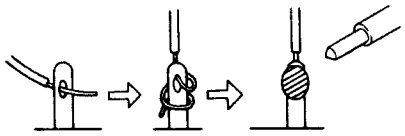


Fig. 1

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10—15 kg of force in any direction will not loosen it.

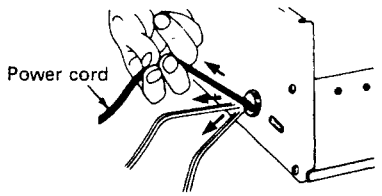


Fig. 2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector
    In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

    1) **Connector part number** : E03830-001
    2) **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
    3) **Replacement procedure**
       (1) Remove the old connector by cutting the wires at a point close to the connector.
       Important : Do not reuse a connector (discard it).

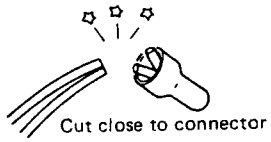


Fig. 3

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

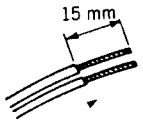


Fig. 4

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

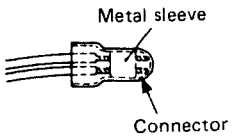


Fig. 5

(4) As shown in Fig. 6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

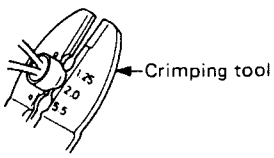


Fig. 6

(5) Check the four points noted in Fig. 7.

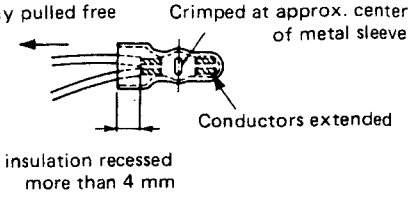

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig. 7

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Insulation resistance test

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

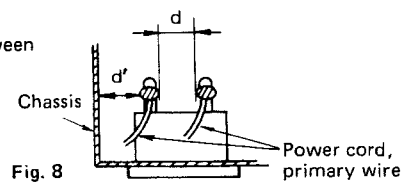


Fig. 8

4. Leakage current test

Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method: (Power ON)

Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

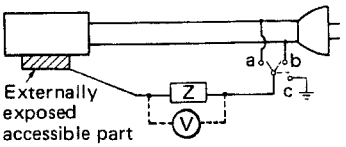


Fig. 9

5. Grounding (Class I model only)

Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).

Measuring Method:

Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.

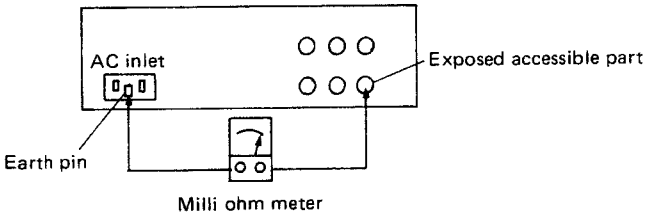


Fig. 10

Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R ≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 minute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	–	AC 900 V 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R ≧ 10 MΩ /500 V DC	AC 3 kV 1 minute (Class II) AC 1.5 kV 1 minute (Class I)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Table 1 Specifications for each region

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	0.15 μF, 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Table 2 Leakage current specifications for each region

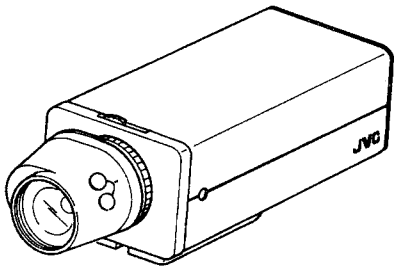
Note: These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

INSTRUCTIONS (For U Version)

JVC

TK-C600

COLOR VIDEO CAMERA



The lens is optional

For Customer Use:
Enter below the Serial No. which is located on the top of the body. Retain this information for future reference.

Model No. TK-C600

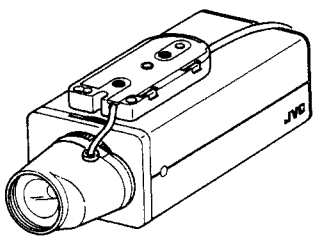
Serial No.

INSTRUCTIONS (For E Version)

JVC

TK-C601

COLOR VIDEO CAMERA



The lens is optional

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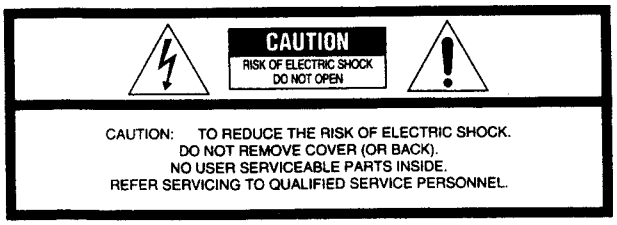
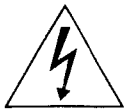

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equi-lateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Information for USA
This device complies with Part 15 of the FCC Rules.
Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

Due to design modification, data given in this instruction book are subject to possible change without prior notice.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

AVERTISSEMENT:
POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER L'APPAREIL A L'HUMIDITE OU A LA PLUIE.

INFORMATION (FOR CANADA)
RENSEIGNEMENT (POUR CANADA)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur : "Appareils Numériques", NMB-003 édictée par le ministre des Communications.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

AVERTISSEMENT:
POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER L'APPAREIL A L'HUMIDITE OU A LA PLUIE.

Due to design modification, data given in this instruction book are subject to possible change without prior notice.

WARNING-THIS APPLIANCE MUST BE EARTHED
IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW:	EARTH
BLUE:	NEUTRAL
BROWN:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug wihich is marked with the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminall which is marked with the letter L or coloured RED.

Thank you for purchasing the JVC color video camera.
To obtain the best results from your new camera, read this instructions carefully before use; retain the manual for future reference.

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CONTROLS, CONNECTORS AND INDICATORS 3
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FEATURES

- 1/3" approx. 270,000 pixels (approx. 250,000 pixels effective) IT-CCD for clear pictures without image lag or geometrical distortion. High-sensitivity design for a low-light sensitivity of 1.5 lx (F1. 2).
- TTL auto tracking white balance adjustment and manual override (1 axis: R-B).
- AGC function to automatically increase camera's sensitivity when the level of ambient light drops.
- Since the camera uses 24V AC, it can be installed and built into a system easily.
- Internal and line lock synchronization (60-Hz regions only) can be selected by switch.
- The automatic electronic shutter adjusts its speed automatically to provide correct exposure even if a manual iris lens is used.
- The built-in backlight compensation function improves the image quality for backlighting subjects.
- The back focus adjustment function allows easy adjustment and installation.
- C-mount or CS-mount lens can be attached to the camera by using the lens mount adjustable function.

PRECAUTIONS

- Since this camera contains an AGC circuit, the sensitivity increases automatically in dark places. It is not a failure when the image looks grainy.
- If a zoom lens is used, check the back focus before mounting the camera.
  This also applies to lens ALC and LEVEL. (See the instructions for details.)
- If a high-intensity object (such as a lamp) is shot, the image on the screen may have vertical lines (smear) or blur (blooming) at its periphery (especially in AES mode). This is a characteristic of the CCD, and is not a defect.
- If an EE lens is used, set the electronic automatic shutter switch (AES) to OFF. If set to ON, flickering may occur. If a manual iris lens is used, set the AES to ON.
- The automatic tracking system may not function properly when shooting with non-standard lighting or lighting with a color temperature which exceeds the capability of the camera. In such a case, set to the "MANU" position.
- When used in hot places, vertical lines may appear on the screen of this camera. This is a characteristic of the CCD and not a failure of the camera.
- If the camera subject is a single solid colour (other than white), the auto white circuit will normally attempt to change this colour to white. In the case of this camera, if it cannot make a correct prediction, the previous white balance setting will be maintained until the subject colours become more varied.

Thank you for purchasing the JVC color video camera.
To obtain the best results from your new camera, read this instructions carefully before use; retain the manual for future reference.

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FEATURES

- As this unit runs on commercial 220 to 240V AC power, you do not have to provide a power supply unit.
- 1/3" approx. 320,000 pixels (approx. 300,000 pixels effective) IT-CCD for clear pictures without image lag or geometrical distortion. High-sensitivity design for a low-light sensitivity of 1.5 lx (F1.2).
- TTL Auto tracking white balance adjustment and manual override (1 axis: R-B)
- AGC function to automatically increase camera's sensitivity when the level of ambient light drops.
- Internal and line lock synchronization (50-Hz regions only) can be selected by switch.
- The automatic electronic shutter adjusts its speed automatically to provide correct exposure even if a manual iris lens is used.
- The built-in backlight compensation function improves the image quality for backlighting subjects.
- The back focus adjustment function allows easy adjustment and installation.
- C-mount or CS-mount lens can be attached to the camera by using the lens mount adjustable function.

PRECAUTIONS

- Since this camera contains an AGC circuit, the sensitivity increases automatically in dark places. It is not a failure when the image looks grainy.
- If a zoom lens is used, check the back focus before mounting the camera. This also applies to lens ALC and LEVEL. (See the instructions on lenses for details.)
- If a high-intensity object (such as a lamp) is shot, the image on the screen may have vertical lines (smear) or blur (blooming) at its periphery (especially in AES mode). This is a characteristic of the CCD, and is not a defect.
- If an EE lens is used, set the electronic automatic shutter switch (AES) to OFF. If set to ON, flickering may occur. If a manual iris lens is used, set the AES to ON.
- When used in hot places, vertical lines may appear on the screen of this camera. This is a characteristic of the CCD and not a failure of the camera.
- The automatic tracking system may not function properly when shooting with non-standard lighting or lighting with a color temperature which exceeds the capability of the camera. In such a case, set to the "MANU" position.
- If the camera subject is a single solid colour (other than white), the auto white circuit will normally attempt to change this colour to white. In the case of this camera, if it cannot make a correct prediction, the previous white balance setting will be maintained until the subject colours become more varied.

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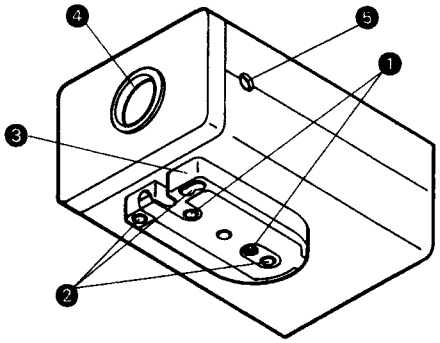
CONTROLS, CONNECTORS AND INDICATORS



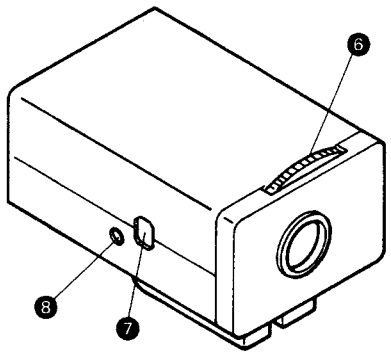
❶ Camera mounting screw holes (1/4")
These screw holes are used to install the camera on a mount or PAN/TILT UNIT. Use either of the two holes according to the situation.

❷ Camera mounting bracket fixing screws (three)

❸ Camera mounting bracket
The camera mounting bracket is mounted on the bottom of the camera at the factory. It can be installed on the top of the camera if necessary. Fit the mounting bracket on the top of the camera head with the three screws ❷.

❹ Lens mount
This mount is used to install a C-mount lens (1/3, 1/2, 2/3, 1 inch) or CS-mount lens (1/2, 1/3 inch)

❺ [BF LOCK] Back focus locking screw
This screw locks the back focus adjustment mechanism.



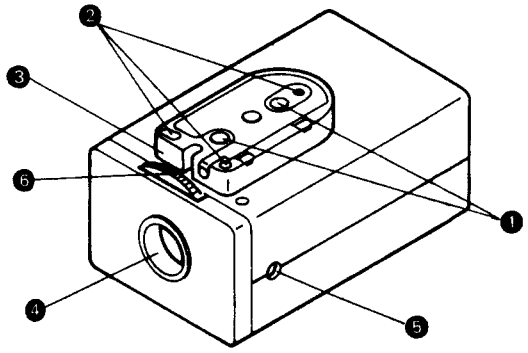
❻ Back focus adjustment ring
This ring is used to adjust the back focus and change the lens mount method. Loosen screw ❺ to turn the ring, and tighten the screw after adjustment.

❼ [DC IRIS] DC iris connector
Connect an auto-iris lens that does not contain an EE amplifier. If the lens cable has a different type of plug, use the supplied 4-pin plug.

❽ [LEVEL] Sensitivity adjustment volume
Adjust the brightness of the image when the DC iris connector ❼ is used.

Monitor screen	LEVEL turning direction
Too bright	Counterclockwise (Towards L)
Too dark	Clockwise (Towards H)

CONTROLS, CONNECTORS AND INDICATORS



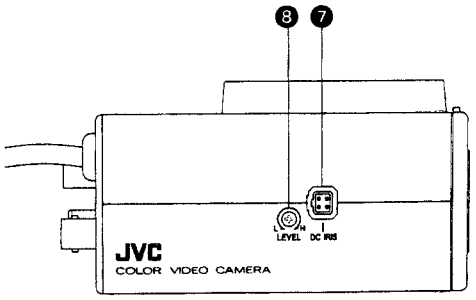
❶ Camera mounting screw holes (1/4")
These screw holes are used to install the camera on a mount or PAN/TILT UNIT. Use either of the two holes according to the situation.

❷ Camera mounting bracket fixing screws (three)

❸ Camera mounting bracket
The camera mounting bracket is mounted on the top of the camera at the factory. It can be installed on the bottom of the camera if necessary. Fit the mounting bracket on the bottom of the camera head with the three screws ❷.

❹ Lens mount
This mount is used to install a C-mount lens (1/3, 1/2, 2/3, 1 inch) or CS-mount lens (1/2, 1/3 inch)

❺ [BF LOCK] Back focus locking screw
This screw locks the back focus adjustment mechanism.

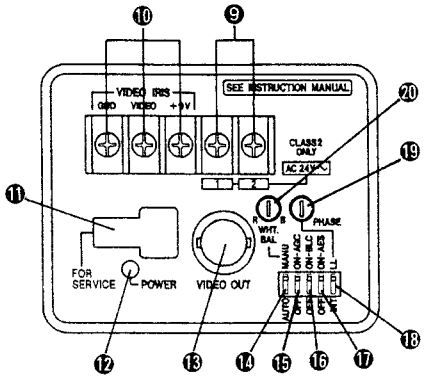


❻ Back focus adjustment ring
This ring is used to adjust the back focus and change the lens mount method. Loosen screw ❺ to turn the ring, and tighten the screw after adjustment.

❼ [DC IRIS] DC iris connector
Connect an auto-iris lens that does not contain an EE amplifier. If the lens cable has a different type of plug, use the 4-pin plug supplied.

❽ [LEVEL] Sensitivity adjustment volume
Adjust the brightness of the image when the DC iris connector ❼ is used.

Monitor screen	LEVEL turning direction
Too bright	Counterclockwise (Towards L)
Too dark	Clockwise (Towards H)



⑨ **[AC24V~] Power input terminal**
Connect the 24V AC power supply.

⑩ **[VIDEO IRIS] Video iris terminal**
Connected to an auto-iris lens containing an EE amplifier.

⑪ **RS-232C Interface Connector**
This connector is used for service.

⑫ **[POWER] Power lamp**
Lights when the power is on.

⑬ **[VIDEO OUT] Video signal output connector**
Outputs the video signal from the camera.
Connect to a video monitor, etc. (75Ω)

⑭ **[WHT. BAL] White balance select switch**
This is used for changing the setting of the white balance.
MANU: Manual adjustment is possible.
AUTO: Accepts different types of lighting (2,850K – 7,000K) using an automatic tracking system.

⑮ **[AGC] Automatic Gain Control Switch**
This automatically increases the camera's sensitivity when the level of ambient light drops.
ON: AGC is activated.
OFF: AGC is not activated.

⑯ **[BLC] Backlight compensation switch**
This switch improves an image that is darkened because of backlighting.
Set this switch to ON for backlight subjects.

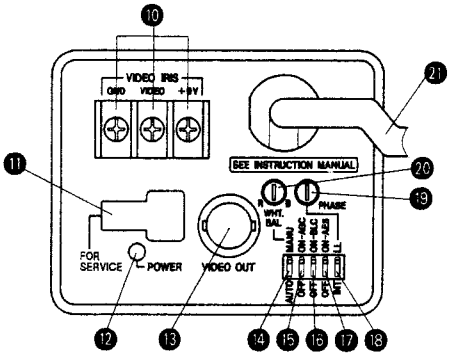
⑰ **[AES] Automatic Electronic Shutter switch**
If this switch is set to "ON" when the manual iris lens is used, the shutter speed varies according to the brightness of the object, and the brightness of the image is automatically adjusted.
If the aperture is fixed or if an EE lens is used, set this switch to OFF.

NOTE
- Hunting may occur at a certain object brightness due to the mechanism of the AES circuit, but this is not a failure.

⑱ **Synchronization select switch**
INT: Set the switch to this position to use the internal sync signal (SYNC or VS).
The camera operates in synchronization with the internal sync signal.
LL: Set the switch to this position to use the frequency of the 24 AC power supply for synchronization (in 60-Hz power regions only).

⑲ **[PHASE] Line lock synchronization phase adjustment**
Used to adjust the phase when the synchronization select switch ⑱ is set to "LL".
Adjust this volume so that the vertical phase of the camera matches the vertical phase of another camera (or system) with a multi-channel oscilloscope. (If the phases do not match using this method, reverse the polarities of the 24V AC power to the camera, then adjust again.)

⑳ **White balance adjustment controls**
When the white balance select switch ⑭ is set to "MANU" the white balance can be adjusted manually.
Turn to the "B" side to decrease the amount of red.
Turn to the "R" side to decrease the amount of blue.



⑩ **[VIDEO IRIS] Video iris terminal**
Connected to an audio-iris lens containing an EE amplifier.

⑪ **RS-232C Interface Connector**
This connector is used for service.

⑫ **[POWER] Power lamp**
Lights when the power is on.

⑬ **[VIDEO OUT] Video signal output connector**
Outputs the video signal from the camera.
Connect to a video monitor, etc. (75Ω)

⑭ **[WHT. BAL] White balance select switch**
This is used for changing the setting of the white balance
MANU: Manual adjustment is possible.
AUTO: Accepts different types of lighting (2,850K – 7,000K) using an automatic tracking system.

⑮ **[AGC] Automatic Gain Control Switch**
This automatically increases the camera's sensitivity when the level of ambient light drops.
ON: AGC is activated.
OFF: AGC is not activated.

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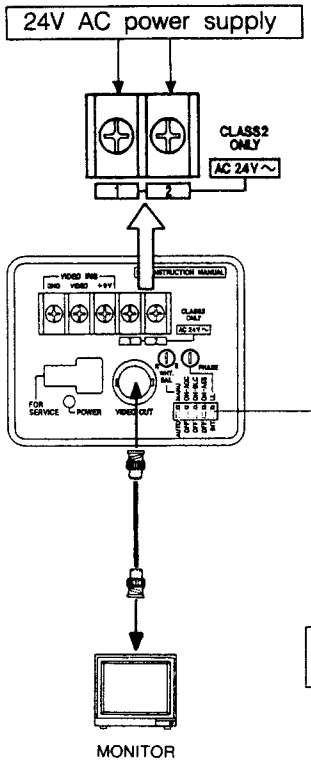
This switch improves an image that is darkened because of backlighting.
Set this switch to ON for backlight subjects.

⑰ **[AES] Automatic Electronic Shutter switch**
If this switch is set to "ON" when the manual iris lens is used, the shutter speed varies according to the brightness of the object, and the brightness of the image is automatically adjusted.
If the aperture is fixed or if an EE lens is used, set this switch to OFF.

CONNECTION

- **Connection examples**



NOTE
- Line lock synchronization can be used in 60 Hz power regions only

NOTE
- Hunting may occur at a certain object brightness due to the mechanism of the AES circuit, but this is not a failure.

⑱ **Synchronization select switch**
INT: Set the switch to this position to use the internal sync signal (SYNC or VS). The camera operates in synchronization with the internal sync signal.
LL: Set the switch to this position to use the frequency of the AC power supply for synchronization (in 50-Hz power regions only).

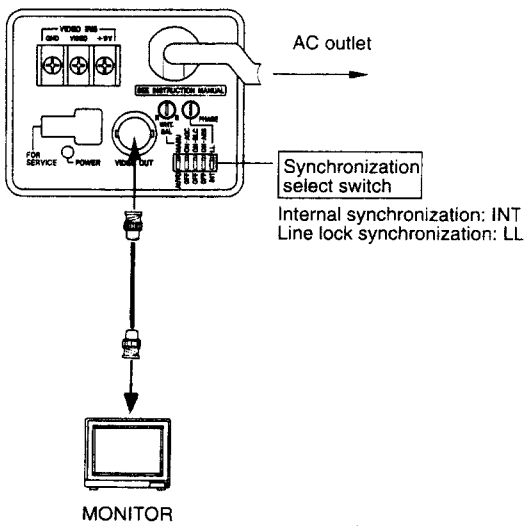
⑲ **[PHASE] Line lock synchronization phase adjustment**
Used to adjust the phase when the synchronization select switch ⑱ is set to "LL".
Adjust this volume so that the vertical phase of the camera matches the vertical phase of another camera (or system) with a multi-channel oscilloscope. (If the phases do not match using this method, reverse the polarities of the AC power to the camera, then adjust again.)

⑳ **White balance adjustment controls**
When the white balance select switch ㉔ is set to "MANU" the white balance can be adjusted manually.
Turn to the "B" side to decrease the amount of red.
Turn to the "R" side to decrease the amount of blue.

㉑ **Power cord (TK-C601 only)**
Supply power from an AC outlet (220 to 240 V)

CONNECTION

- **Connection examples**



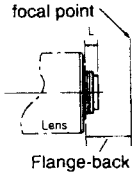
NOTE
- Line lock synchronization can be used in 50 Hz power regions only

LENS

- **Mounting a lens**

① Before mounting a lens, check whether it is a C-mount or CS-mount one.
This camera has a CS-mount. (Fig. 1-1) If a C-mount lens is used, loosen back focus locking screw (Page 3 ❺), then turn the back focus adjustment ring (Page 3 ❻) in the direction of the arrow in the Fig. 1-1 to change the mounting method.
(Fig. 1-2 shows the state for the C-mount.)

CAUTIONS
- The ring cannot be turned with fingers from a certain point. Use a screwdriver or any other tool with a thin tip to turn it further. (Fig. 1-3)
- Dimension L of the lens shown in the illustration below must be as shown in the table below. If L exceeds the value in the table, it may damage the inside of the camera or correct mounting may be impossible; never use such lenses. Do not attach the C-mount lens when using a CS-mount.



Lens	Flange back	Dimension L
C mount lens	17.526 mm	10 mm or less
CS mount lens	12.5 mm	5.5 mm or less

② Mount the lens on the camera by turning the lens clockwise. Adjust its position. (Fig. 2)
③ If the lens has an auto-iris mechanism, connect the lens cable.
Ⓐ If the lens does not contain an EE amplifier, connect the cable to the DC IRIS connector on the side.
If the lens cable has a different type of plug, use the 4-pin plug supplied. (Fig. 2-1)
Ⓑ If the lens contains an EE amplifier, connect the cable to the VIDEO IRIS terminal on the rear. (Fig. 2-2)

Fig. 1

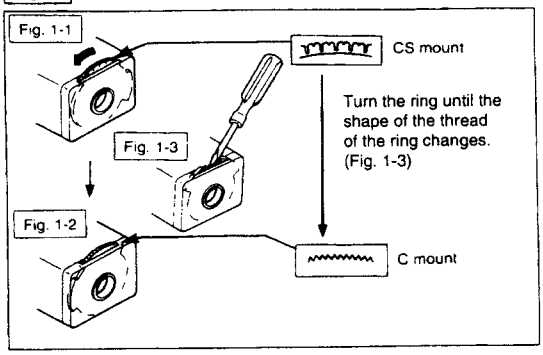


Fig. 2

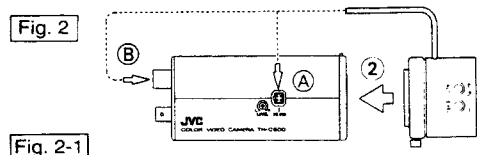


Fig. 2-1

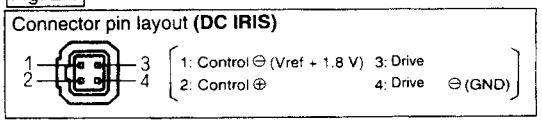
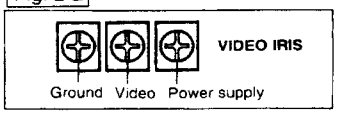


Fig. 2-2

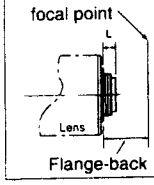


LENS

- **Mounting a lens**

① Before mounting a lens, check whether it is a C-mount or CS-mount one.
This camera has a CS-mount. (Fig. 1-1) If a C-mount lens is used, loosen back focus locking screw (Page 3 ❺), then turn the back focus adjustment ring (Page 3 ❻) in the direction of the arrow in the Fig. 1-1 to change the mounting method.
(Fig. 1-2 shows the state for the C-mount.)

CAUTIONS
- The ring cannot be turned with fingers from a certain point. Use a screwdriver or any other tool with a thin tip to turn it further. (Fig. 1-3)
- Dimension L of the lens shown in the illustration below must be as shown in the table below. If L exceeds the value in the table, it may damage the inside of the camera or correct mounting may be impossible; never use such lenses. Do not attach the C-mount lens when using a CS-mount.



Lens	Flange back	Dimension L
C mount lens	17.526 mm	10 mm or less
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② Mount the lens on the camera by turning the lens clockwise. Adjust its position. (Fig. 2)
③ If the lens has an auto-iris mechanism, connect the lens cable.
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If the lens cable has a different type of plug, use the 4-pin plug supplied. (Fig. 2-1)
Ⓑ If the lens contains an EE amplifier, connect the cable to the VIDEO IRIS terminal on the rear. (Fig. 2-2)

Fig. 1

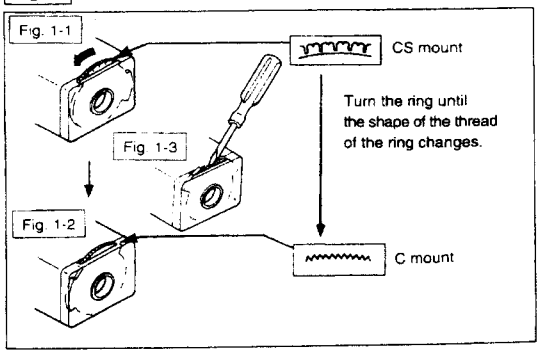


Fig. 2

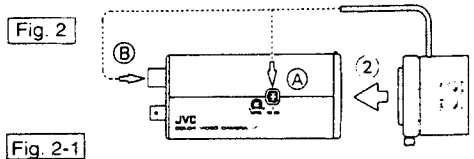


Fig. 2-1

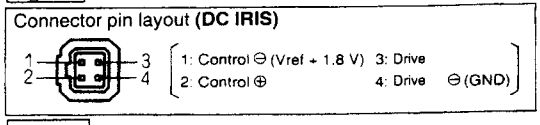
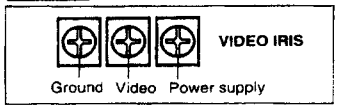


Fig. 2-2

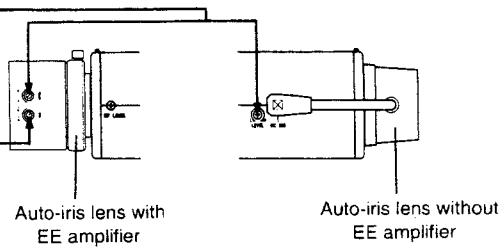


- Connect the camera according to the connection method, turn it on, display an image on the monitor, and check the image. The camera has been factory-adjusted to the widest range, but it may need to be adjusted according to the object conditions or combination of lenses. If the image is unnatural, adjust it as follows:
- **LEVEL adjustment**

Monitor screen	LEVEL turning direction
Too bright	Counterclockwise (Toward L)
Too dark	Clockwise (Toward H)

- **ALC adjustment**

Monitor screen	ALC turning direction
Part (high-intensity part) of the screen halates.	Clockwise (Toward Pk)
Other part of screen (except high-intensity part) darkens.	Counterclockwise (Toward Av)



NOTE: If the sensitivity adjustment [LEVEL] is turned excessively to L, the sensitivity increases because of the AGC function of the camera, and the image looks grainy.

- Connect the camera according to the connection method, turn it on, display an image on the monitor, and check the image. The camera has been factory-adjusted to the best position, but it may need to be adjusted according to the object conditions or combination of lenses. If the image is unnatural, adjust it as follows:
- **LEVEL adjustment**

Monitor screen	LEVEL turning direction
Too bright	Counterclockwise (Toward L)
Too dark	Clockwise (Toward H)

- **ALC adjustment**

Monitor screen	ALC turning direction
Part (high-intensity part) of the screen halates.	Clockwise (Toward Pk)
Other part of screen (except high-intensity part) darkens.	Counterclockwise (Toward Av)

Auto-iris lens with EE amplifier
Auto-iris lens without EE amplifier

NOTE: If the sensitivity adjustment [LEVEL] is turned excessively to L, the sensitivity increases because of the AGC function of the camera, and the image looks grainy.

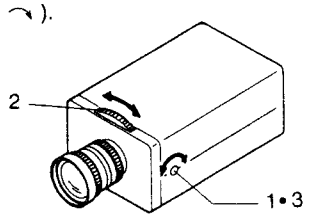
- **Back focus adjustment**

The back focus has been factory-adjusted to the best point for CS-mount lens, but it may need to be re-adjusted if the mount is changed to the C-mount or if a different lens is used. If required, adjust it as follows:

With a fixed-focus lens

If the focus can not be adjusted correctly by rotating the lens focus ring, adjust the back focus as follows.

1. Loosen the back focus securing screw by turning it counterclockwise (↶) with a screwdriver.
2. Turn the back focus adjustment ring to focus at the best point.
3. Tighten the back focus securing screw by turning it clockwise (↷).



With a zoom lens

If the image is out of focus when zooming (wide-angle - telephoto), adjust the camera as follows:

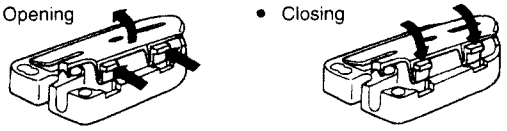
① Shoot a comparatively dark scene with thin lines about three meters away from the camera.
② Set the lens to the maximum telephoto position, and adjust the lens focus.
③ Set the lens to the maximum wide-angle position, and adjust the back focus.
④ Repeat steps ② and ③ two or three times.

- **Installing the EE cable**

If the cable is too long, arrange it in the camera mounting bracket as shown below.

Opening/closing the cover

• Opening • Closing



Arranging the iris cable (example)

• Threading • Straight feeding

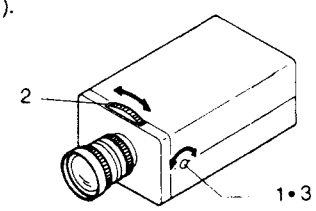
- **Back focus adjustment**

The back focus has been factory-adjusted to the best point for CS-mount lens, but it may need to be re-adjusted if the mount is changed to the C-mount or if a different lens is used. If required, adjust it as follows:

With a fixed-focus lens

If the focus can not be adjusted correctly by rotating the lens focus ring, adjust the back focus as follows.

1. Loosen the back focus locking screw by turning it counterclockwise (↶) with a screwdriver.
2. Turn the back focus adjustment ring to focus at the best point.
3. Tighten the back focus locking screw by turning it clockwise (↷).



With a zoom lens

If the image is out of focus when zooming (wide-angle - telephoto), adjust the camera as follows:

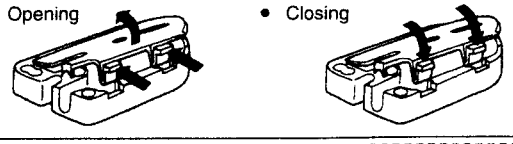
① Shoot a comparatively dark scene with thin lines about three meters away from the camera.
② Set the lens to the maximum telephoto position, and adjust the lens focus.
③ Set the lens to the maximum wide-angle position, and adjust the focus.
④ Repeat steps ② and ③ two or three times.

- **Installing the EE cable**

If the cable is too long, arrange it in the camera mounting bracket as shown below.

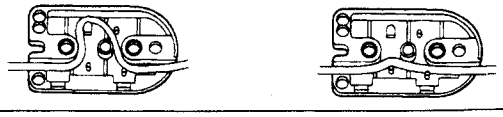
Opening/closing the cover

• Opening • Closing



Arranging the iris cable (example)

• Threading • Straight feeding

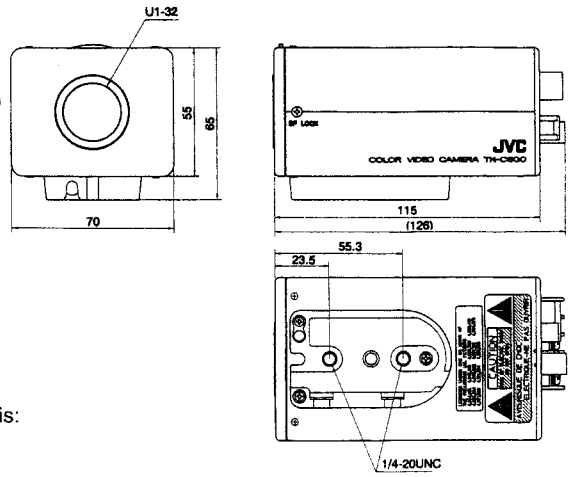


[TK-C600U]

SPECIFICATIONS

Type	: Color Video Camera
Signal system	: Based on NTSC standard
Image sensor	: Interline-transfer CCD (with complementary color filter)
Number of effective pixels	: 250,000 (512 (H) × 492 (V))
Image size	: 1/3 inch(pickup area: 4.8(H) × 3.6(V) mm)
Synchronization method	: Internal, and line lock synchronization (60-Hz regions only)
Scanning lines	: 525 lines, 2:1 interlaced
Scanning frequency	: (H) 15.734 kHz (V) 59.94 Hz
Resolution	: 330 TV lines (horizontal)
Video output	: Composite video signal 1V(p-p), 75Ω, unbalanced
Video S/N ratio	: 46 dB
Minimum required illumination	: 1.5 lx (F1.2)
Switching functions	: AGC (ON/OFF), BLC (ON/OFF), Sync (INT/LL), White balance (Auto/Manu)
Adjusting functions	: Flange-back, Manual white balance (1 axis: R-B). V phase, IRIS LEVEL Control
Lens mount	: C/CS mount
Power supply	: 24V AC, 50/60 Hz
Power consumption	: 4 W
Operating temperature range	: –10°C to +50°C (Recommended temperature range: 0°C to +40°C)
Weight	: 470 g
Provided accessory	: 4P Plug ..... × 1

Dimensions (mm)



Design and specifications are subject to change without notice.

[TK-C601EG]

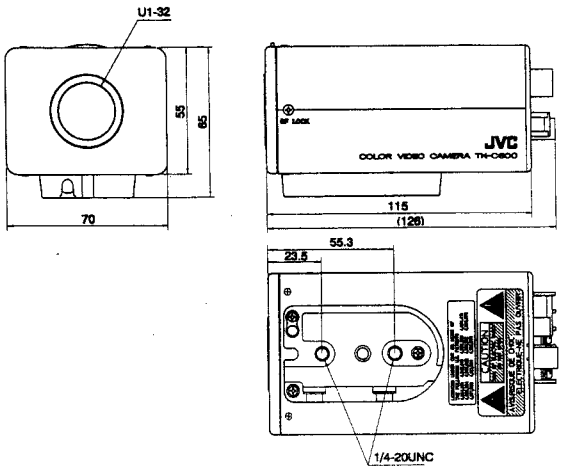
SPECIFICATIONS

Type	: Color Video Camera
Signal system	: Based on PAL standard
Image sensor	: Interline-transfer CCD (with complementary color filter)
Number of effective pixels	: 300,000 (512 (H) × 582 (V)) (pickup area: 4.8(H) × 3.6(V) mm)
Image size	: 1/3 inch
Synchronization method	: Internal, and line lock synchronization (50-Hz regions only)
Scanning lines	: 625 lines, 2:1 interlaced
Scanning frequency	: (H) 15.625 kHz (V) 50.0 Hz
Resolution	: 330 TV lines (horizontal)
Video output	: Composite video signal 1Vp-p, 75Ω, unbalanced
Video S/N ratio	: 46 dB
Minimum required illumination	: 1.5 lx (F1.2)
Switching functions	: AGC (ON/OFF), BLC (ON/OFF), Sync (INT/LL), White balance (Auto/Manu)
Adjusting functions	: Flange-back, Manual white balance (1 axis: R-B). V phase, IRIS LEVEL Control
Lens mount	: C/CS mount
Power supply	: 220 V to 240 V AC 50/60 Hz
Power consumption	: 4.5 W
Operating temperature range	: –10°C to +50°C (Recommended temperature range: 0°C to +40°C)
Weight	: 800 g
Provided accessory	: 4P Plug ..... × 1

[TK-C600E]
SPECIFICATIONS

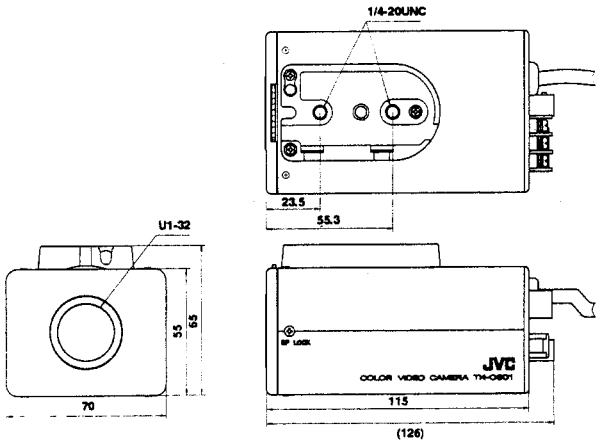
Type	: Color Video Camera
Signal system	: Based on PAL standard
Image sensor	: Interline-transfer CCD (with complementary color filter)
Number of effective pixels	: 300,000 (512 (H) × 582 (V)) (pickup area: 4.8(H) × 3.6(V) mm)
Image size	: 1/3 inch
Synchronization method	: Internal, and line lock synchronization (50-Hz regions only)
Scanning lines	: 625 lines, 2:1 interlaced
Scanning frequency	: (H) 15.625 kHz (V) 50.0 Hz
Resolution	: 330 TV lines (horizontal)
Video output	: Composite video signal 1Vp-p, 75Ω, unbalanced
Video S/N ratio	: 46 dB
Minimum required illumination	: 1.5 lx (F1.2)
Switching functions	: AGC (ON/OFF), BLC (ON/OFF), Sync (INT/LL), White balance (Auto/Manu)
Adjusting functions	: Flange-back, Manual white balance (1 axis: R-B). V phase, IRIS LEVEL Control
Lens mount	: C/CS mount
Power supply	: 24V AC, 50/60 Hz, 12V DC
Power consumption	: 4 W
Operating temperature range	: –10°C to +50°C (Recommended temperature range: 0°C to +40°C)
Weight	: 470 g
Provided accessory	: 4P Plug ..... × 1

Dimensions (mm)



Design and specifications are subject to change without notice.

Dimensions (mm):



Design and specifications are subject to change without notice.

[redacted]

JVC

VICTOR COMPANY OF JAPAN, LIMITED

Printed in Japan
SC96580

[redacted]

JVC

VICTOR COMPANY OF JAPAN, LIMITED

Printed in Japan
SC9681

SECTION 1
DISASSEMBLY

1.1 FUSE REPLACEMENT (TK-C600)

Before replacing a fuse, the reason why it blew should be invested to prevent trouble from spreading. The malfunction should be repaired before replacing the fuse.

1. Detach the top cover, the rear panel and the bottom cover according to "1.2 REMOVAL OF TOP COVER", "1.3 REMOVAL OF REAR PANEL" and "1.4 REMOVAL OF BOTTOM COVER".
2. Detach the chassis and boards according to "1.5 REMOVAL OF BOARDS".
3. There is the fuse F101 on the MOTHER BOARD.

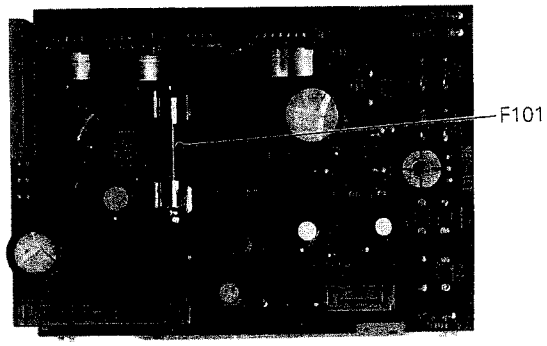


Fig. 1-1

For the safety and protection of the unit, replace only with fuse having specified part numbers.

	Part Number	
	U version	E version
⚠ F101	QMF51U1-1R0 1 A 125 A	QMF51A2-1R0 T1 A 250 V

1.2 REMOVAL OF TOP COVER

Remove two screws ① and a screw ②, and then detach the top cover Ⓐ.

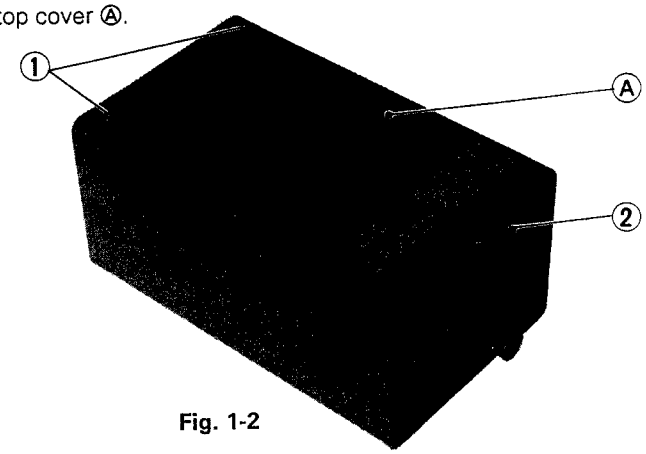


Fig. 1-2

1.3 REMOVAL OF REAR PANEL

Remove three screws ③, and then remove the rear panel Ⓑ with TERMINAL board.

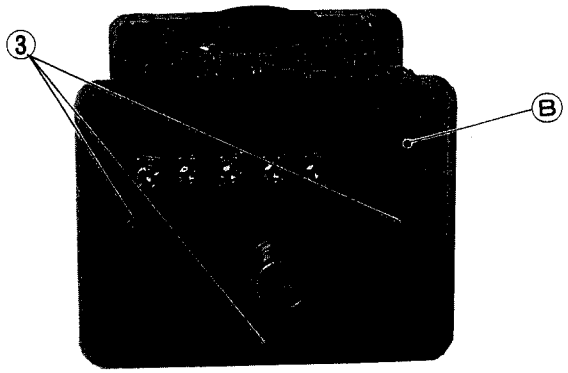


Fig. 1-3

1.4 REMOVAL OF BOTTOM COVER

Remove two screws ④, and then detach the bottom cover ©.

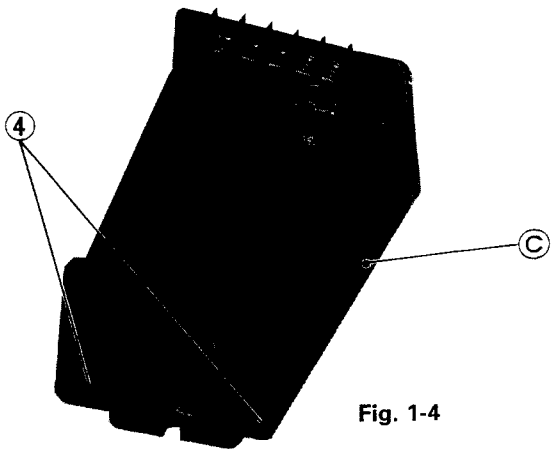


Fig. 1-4

1.5 REMOVAL OF BOARDS

1. Remove a screw ⑤ from the CHASSIS Ⓓ, and then remove the PR board.

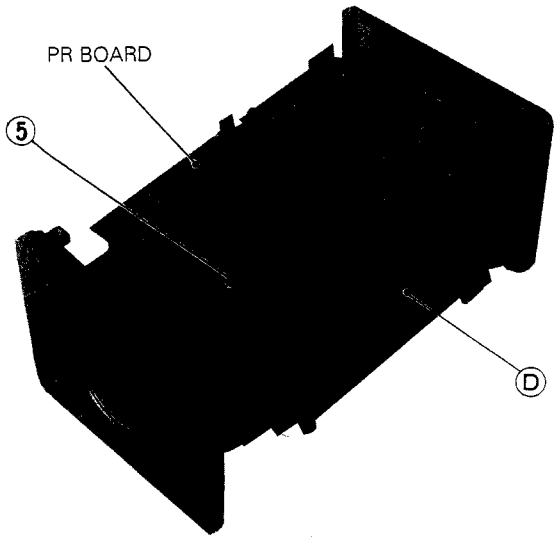


Fig. 1-5

2. Remove a screw ⑥ from the CHASSIS Ⓓ, and then remove the MOTHER board. The SUB board is connected with the MOTHER board show in Fig. 1-7.

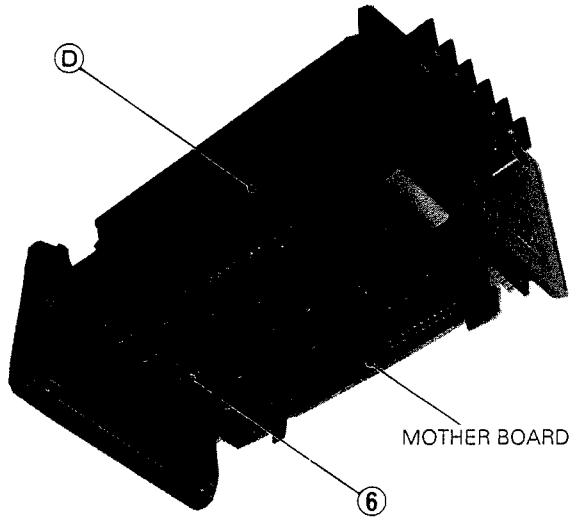


Fig. 1-6

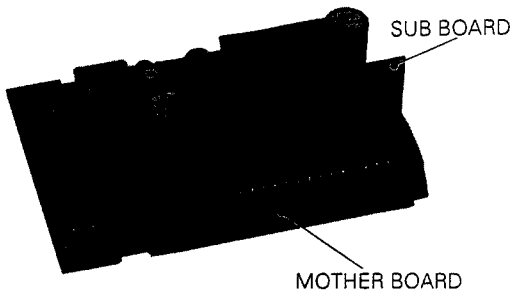


Fig. 1-7

1.6 REPLACEMENT OF CCD IMAGE SENSOR

- The CCD image sensor is not interchangeable with anything other than the specified one.
- Be careful in handling a new image sensor not to leave fingerprints on the glass surface as well as not to make it grease-stained. To clean dust and greasy stain, breathe out to mist the glass surface and gently wipe it with cotton swab, etc. (Do not use alcohol and the like.)
- After replacement of the CCD image sensor, the set needs to undergo electrical adjustment.
- The image sensor has a weak characteristic in electrostatic destruction. When replacing, make sure to electrostatic shielding of the CCD image sensor.
- For a while after removing the image sensor, there are electric charge remaining at the circuit terminals. If a new image sensor is set into the socket in such a condition, it may damage it in a moment because of stored electric charge. When replacing the image sensor, wait a few (2 to 3) minutes after removing it before setting new one into the socket.

● OPTICAL LOW PASS FILTER

The optical low pass filter has no direction of front and behind. Treat carefully that don't stick fingerprints and oils.

● Removal of CCD image sensor

1. Remove two screws ⑦ from the CCD board and remove the CCD board (CCD image sensor is removed with the CCD board).

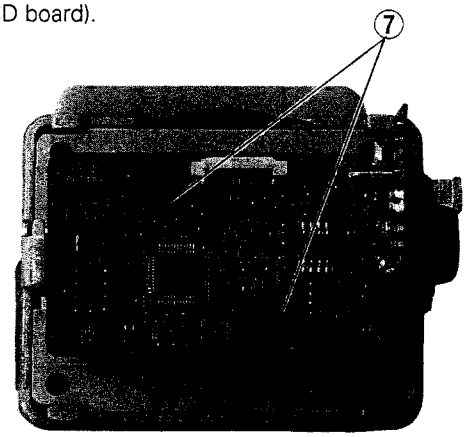


Fig. 1-8

2. Pull the CCD image sensor out of the CCD board.

● **Installation of new CCD image sensor**

1. When installing a new CCD image sensor, pay attention to its orientation.
2. Install the CCD image sensor as its dent is located in the right side (back focus adjusting screw is located in the left side).

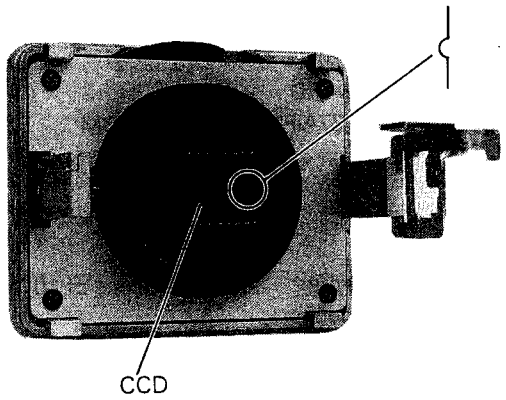


Fig. 1-9

3. Adjust the position of the image sensor's plate while setting it on the CCD board.
4. Reinstall the CCD board with careful attention to the IC socket and pins.

1.7 ATTENTIONAL PERFORMANCE

The following phenomena, that may sometimes occur in operation, are not faulty but resulting from the specifications.

1. The AUTO WHITE BALANCE does not work when the image is unicolor.
2. The design white clip level of this camera is 120%.
3. There may be vertical stripes appearing on borders between different colors.
4. Transversal noise may appear when the camera is used at considerably low temperature.
5. The adjustment procedure of the manual white balance adjustment VR (WHT BAL ADJ VR) is different from that of previous cameras (TK-1070, etc.).
   Turning the WHT BAL ADJ VR toward the R side makes the picture color bluish, while turning it toward the B side makes the color reddish.
6. If a metal screwdriver or the like touches the WHT BAL ADJ VR, noise may appear in the picture.
7. Manual white balance adjustment for this camera may slightly come off the most precise position since it is performed only with the WHT BAL ADJ VR.

SECTION 2
ELECTRICAL ADJUSTMENT

This camera has no need of adjustment with variable resistors for respective settings thanks to the function of the EVR (Electric Variable Resistor) incorporated in it. To change the setting of adjustment items, use a personal computer with the adjustment software to change the set value of the EVR for each adjustment item as well as to store the changed data into the memory of the camera.

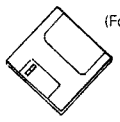
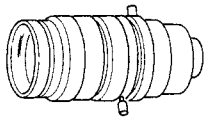
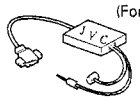
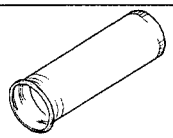
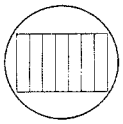
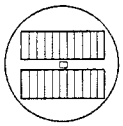
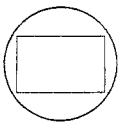
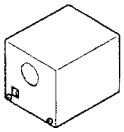
If any of the following parts is replaced or the camera needs to adjust settings of itself such as auto white balance, etc., it requires adjustment of the EVR with a personal computer.

- CCD BOARD
  IC101 MN3716MFE (NTSC) CCD IMAGE SENSOR
  MN3726MFE (PAL) CCD IMAGE SENSOR
- PROCESS BOARD
  IC208 S-2927AIF10G E^2PROM

2.1 EQUIPMENT NECESSARY FOR ADJUSTMENT

- Oscilloscope : Available for 100 MHz or more band and already calibrated
- Vectorscope
- Digital voltmenter: Input impedance of 10 MΩ or more
- Color video monitor

2.2 INSTRUMENTS REQUIRED EXCLUSIVELY FOR ADJUSTMENT WITH PERSONAL COMPUTER

Program disk	Standard lens for adjustment
 (For IBM-PC) PLSC1123	 HZ-H8061
Interface cable	Conversion cable
 (For IBM-PC) YTU93063	YTU94066
Infinity adjustment lens	Color bar chart
 YTU92001B	 YTU92001-051
Gray scale chart	Test chart (Portrait)
 YTU92001-052	 YTU92001-054
Light box	Color temp. conversion filter
 YTU93072	KODAK Wratten gelatin filter • No. 80B + No. 82B (or equivalent) • No. 80B + CC10B + CC05R (or equivalent)

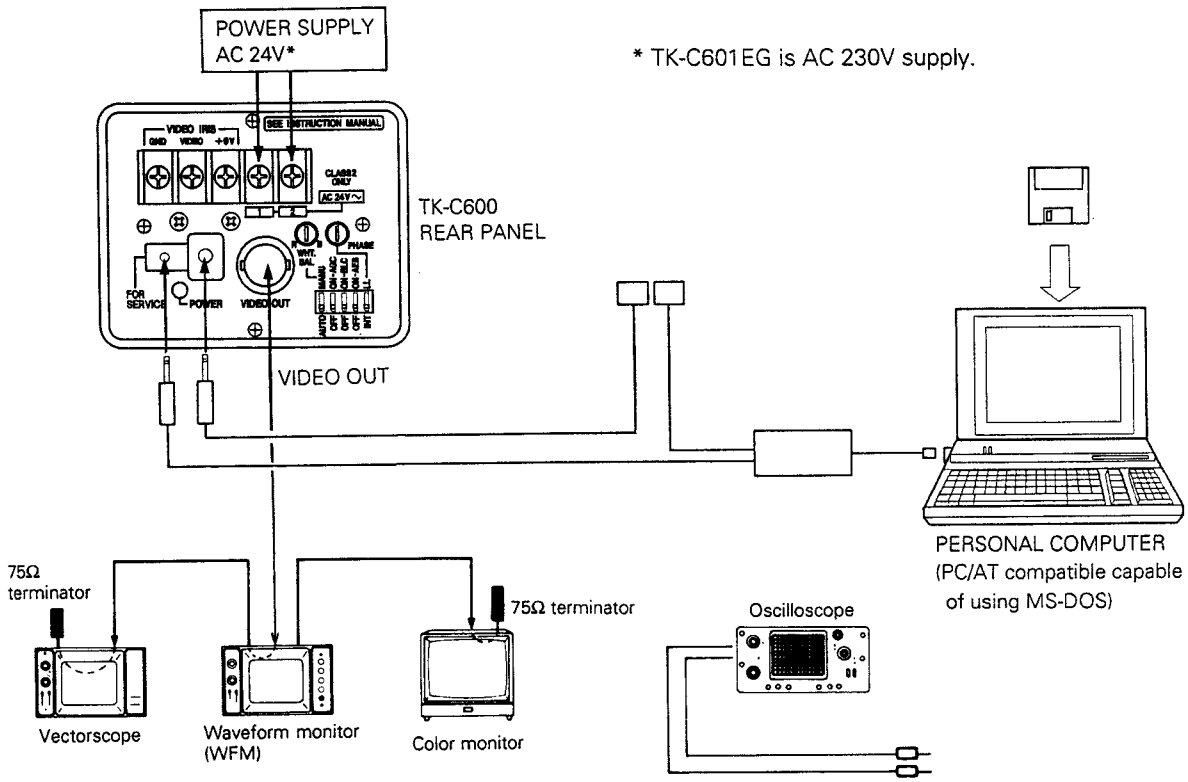
Note: Parts that is marked with asterisk (*) are able to get at your side.

2.3 ADJUSTMENT ITEMS OF ADJUSTMENT SOFTWARE

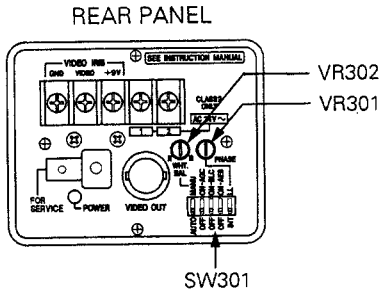
1	OFD
2	Y SETUP
3	Y GAIN
4	NORMAL Y LEVEL
5	COLOR DIFFERENCE BALANCE
6	CARRIER DOTT BALANCE
7	CARRIER BALANCE
8	BURST PHASE (Only PAL model)
9	SC PHASE (Only PAL model)
10	OFFSET DATA
11	INDOOR/OUTDOOR DATA
12	R, B GAIN
13	COLOR DIFFERENCE GAIN
14	COLOR DIFFERENCE MATRIX
15	WHITE LEVEL

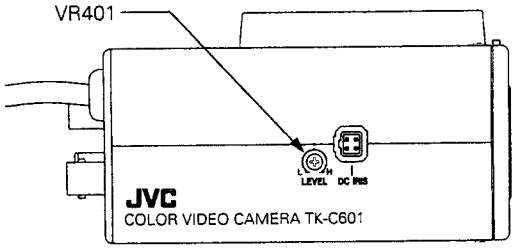
2.4 GENERAL SETUP

Hook up the equipment as shown in the figure.



2.5 SWITCH SETTING FOR ADJUSTMENT





- SW301 (TERMINAL BOARD)

WHT. BAL	AUTO
AGC	OFF
BLC	OFF
AES	OFF
LL/INT	INT

- VR301, VR302, VR401 — Mechanical center position.

2.6 PROGRAM EXECUTE

1. Install the MS-DOS MOUSE. COM. (This program can also be used without Mouse.)
2. At the MS-DOS command line, type as follows.
   A>TK-C600 {/N or /P} [B/W] [/COM2] <Enter>
   - /N or /P Set type of TV system. The program cannot start without specified.
     N : NTSC
     P : PAL
   - /BW Set if the monitor is Black & white.
   - /COM2 Set if a serial mouse is connected to the COM1 serial port to allow camera data communicate via COM2. If not specified, COM1 becomes the main communication port automatically.
3. At the "Welcome" message, click <OK> or press [ENTER] key.
   Follow the message appearing on the display to prepare and execute each setting.

MC-Service

SECTION 3
CHARTS AND DIAGRAMS

■ SCHEMATIC DIAGRAM NOTES

● Schematic safety precaution

⚠ Parts are safety related parts.
When replacing them, be sure to use the specified parts.

Voltage and waveform measurements.
Voltage: Measured with digital voltmeter in DC range; iris closed.
Waveform: Color bars illuminated at more than 4000 lux at 3200 K lighting.

● Terminal logic
Top bar of terminal name show input or output logic.
Top bar shows, the control circuit become active at negative (low) logic input for example.

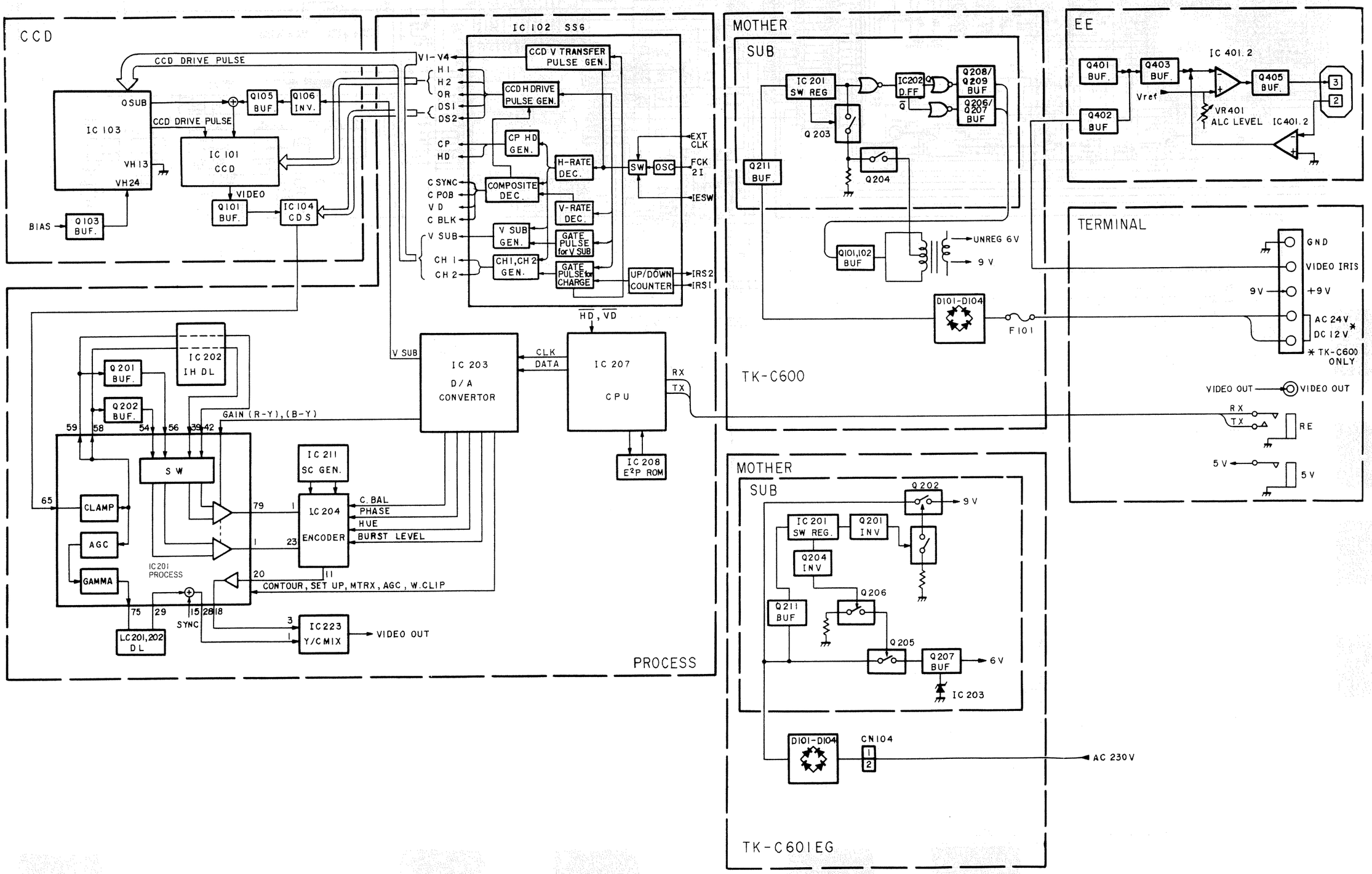
• Resistor		• Capacitor		• Coil	
NO UNITS	: [Ω]	NO UNITS	: [μF]	μ/μH	: [μH]
K	: [kΩ]	P	: [pF]	m	: [mH]
M	: [MΩ]				

■ REPLACING SUBMINIATURE "CHIP" PARTS

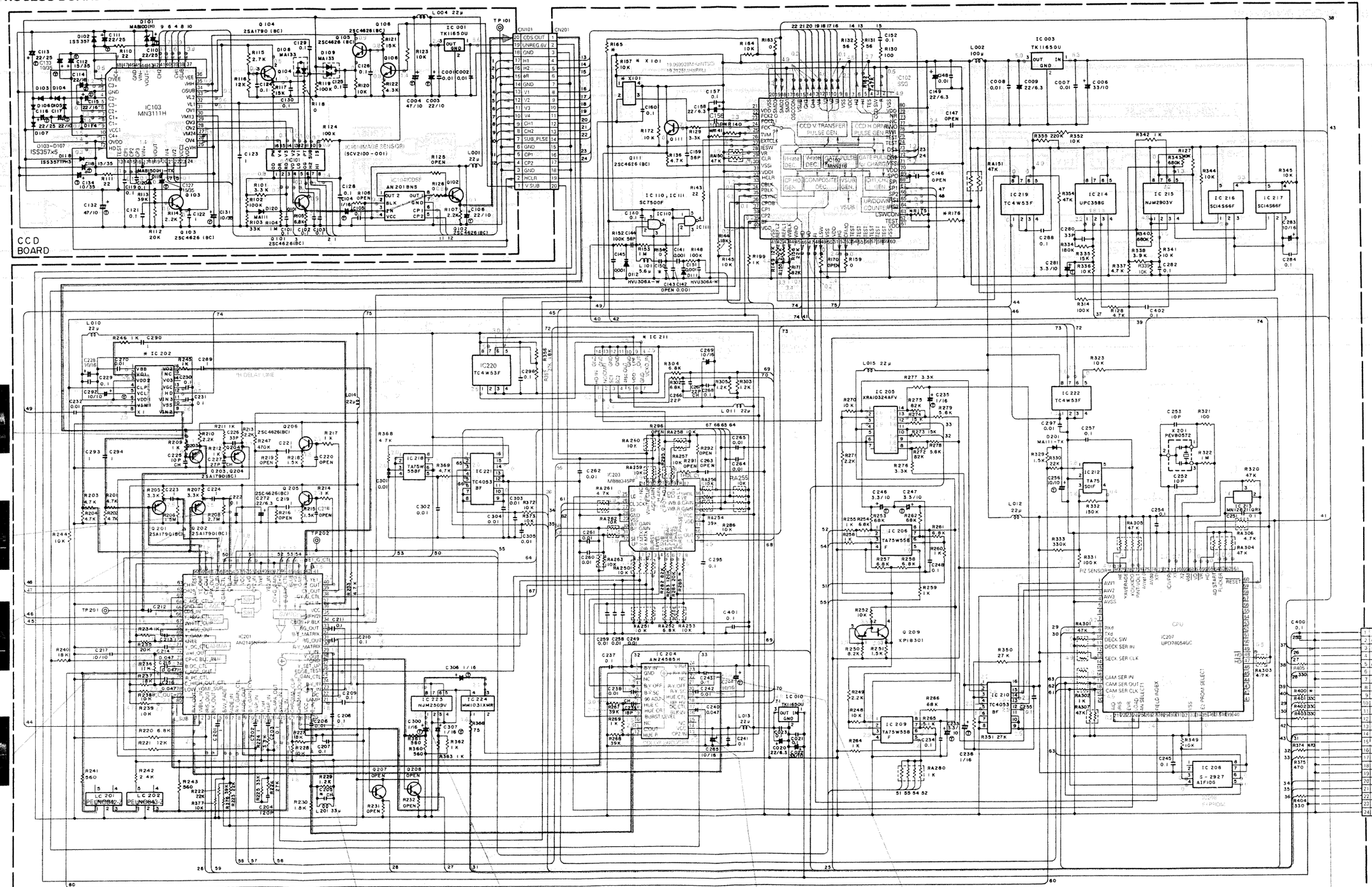
- Some resistors, shorting jumpers (0 Ω resistance), ceramic capacitors, transistors, and diodes are chip parts. These chip parts cannot be reused after they are once removed.
- Soldering cautions:
  1) Do not apply heat for more than 3 seconds.
  2) Avoid using a rubbing stroke when soldering.
  3) Discard removed chips; do not reuse them.
  4) Supplementary cementing is not required.
  5) Use care not to scratch or otherwise damage the chips.

• On Replacing Chip Parts
Use a soldering iron (rated temp.: 260-300°C, 17 W) which is sharp in the tip and high in the insulation.
Notes:
- There are many mini flat ICs used in the camera. When unsolder them and cutting off IC pins to remove them, do the work most carefully not to get the print pattern of the board damaged nor come off.
- When soldering is tried twice or more for the same chip parts, carefully wipe flux dusts off with cloth moistened with absolute alcohol, otherwise the IC may malfunction owing to remaining dusts.

3.1 BLOCK DIAGRAM



3.2 CCD/PROCESS BOARD SCHEMATIC DIAGRAM



	R140	R141	R163	R165	R175	R176	R285	C150	C205	R460	IC101	IC211	IC202	X101
NTSC	OPEN	0Ω	OPEN/1PIN	0Ω/1PIN	OPEN	47K	0Ω	27P	56P	OPEN/1PIN	MN3776MFE	EHDGA1533	MN3860SA	2FS-19.06992PB
				OPEN						0Ω				
PAL	0Ω	OPEN	0Ω	OPEN	47K	OPEN	20K	22P	39P	0Ω	MN3726MFE	EHDGA1524	MN3861SA	2FS-19.3125PB

220mVp-p
H-rate

350mVp-p
H-rate

350mVp-p
H-rate

800mVp-p
H-rate

500mVp-p
H-rate

350mVp-p
H-rate

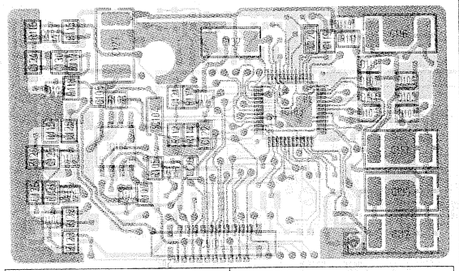
500mVp-p
H-rate

500mVp-p
H-rate

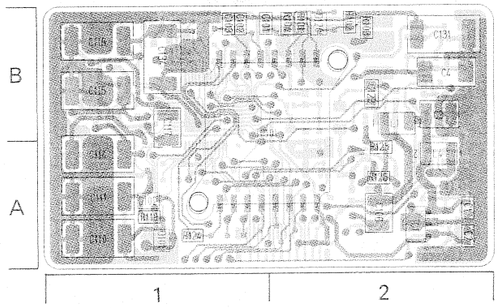
1.7Vp-p
H-rate

3.3 CCD CIRCUIT BOARD

— Side A —



— Side B —



● **ADDRESS TABLE OF BOARD PARTS**

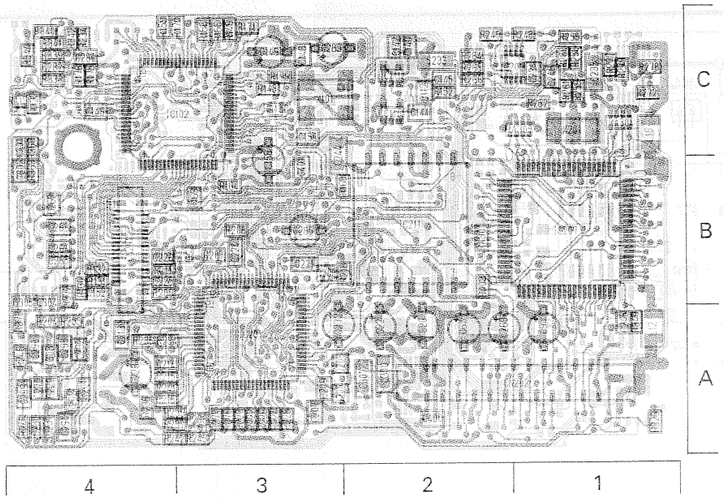
Each address may have an address error by one interval.

Side — A–1C — Y axis / X axis

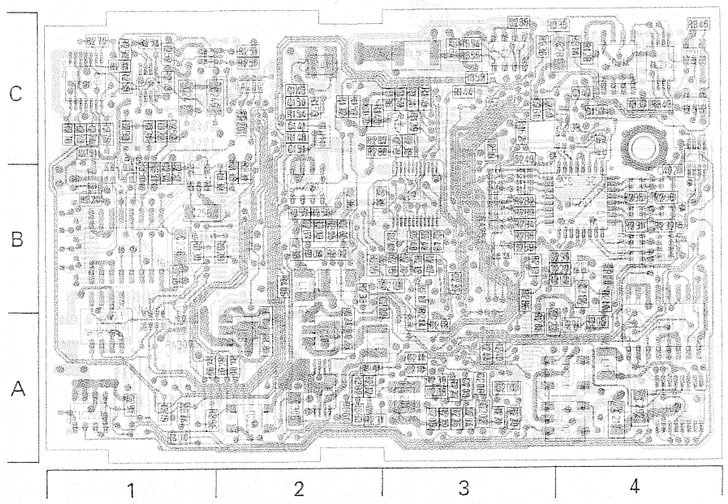
IC1	B-2A	Q102	A-2A	D101	B-1A	D107	A-1B	D120	B-2B
IC101	B-2B	Q103	A-2B	D102	B-1A	D108	A-2B		
IC103	A-1B	Q104	A-2B	D103	A-1B	D109	A-2A	TP101	A-1A
IC104	A-2A	Q105	A-2A	D104	A-1B	D114	A-1B		
		Q106	A-2A	D105	A-1B	D118	A-1B		
Q101	A-2A			D106	A-1B	D119	A-1B		

3.4 PROCESS CIRCUIT BOARD

— Side A —



— Side B —



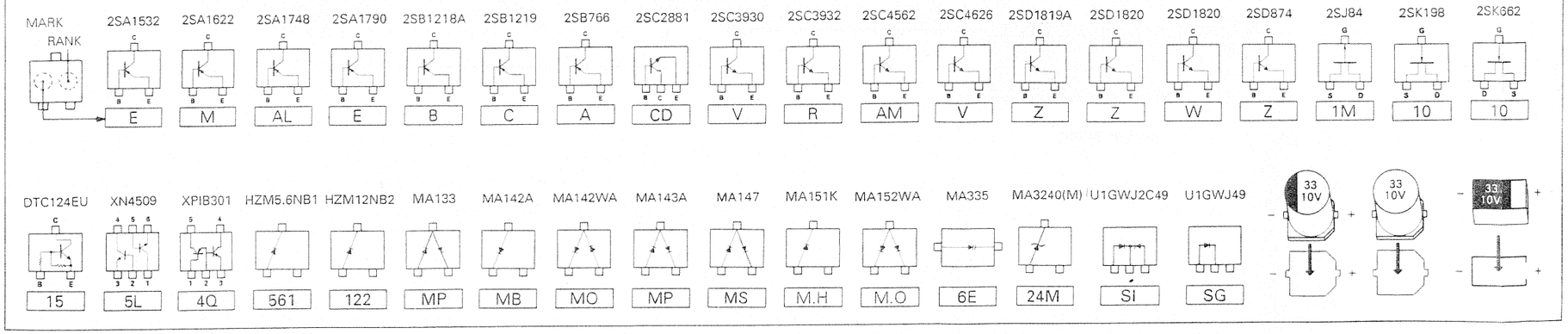
● **ADDRESS TABLE OF BOARD PARTS**

Each address may have an address error by one interval.

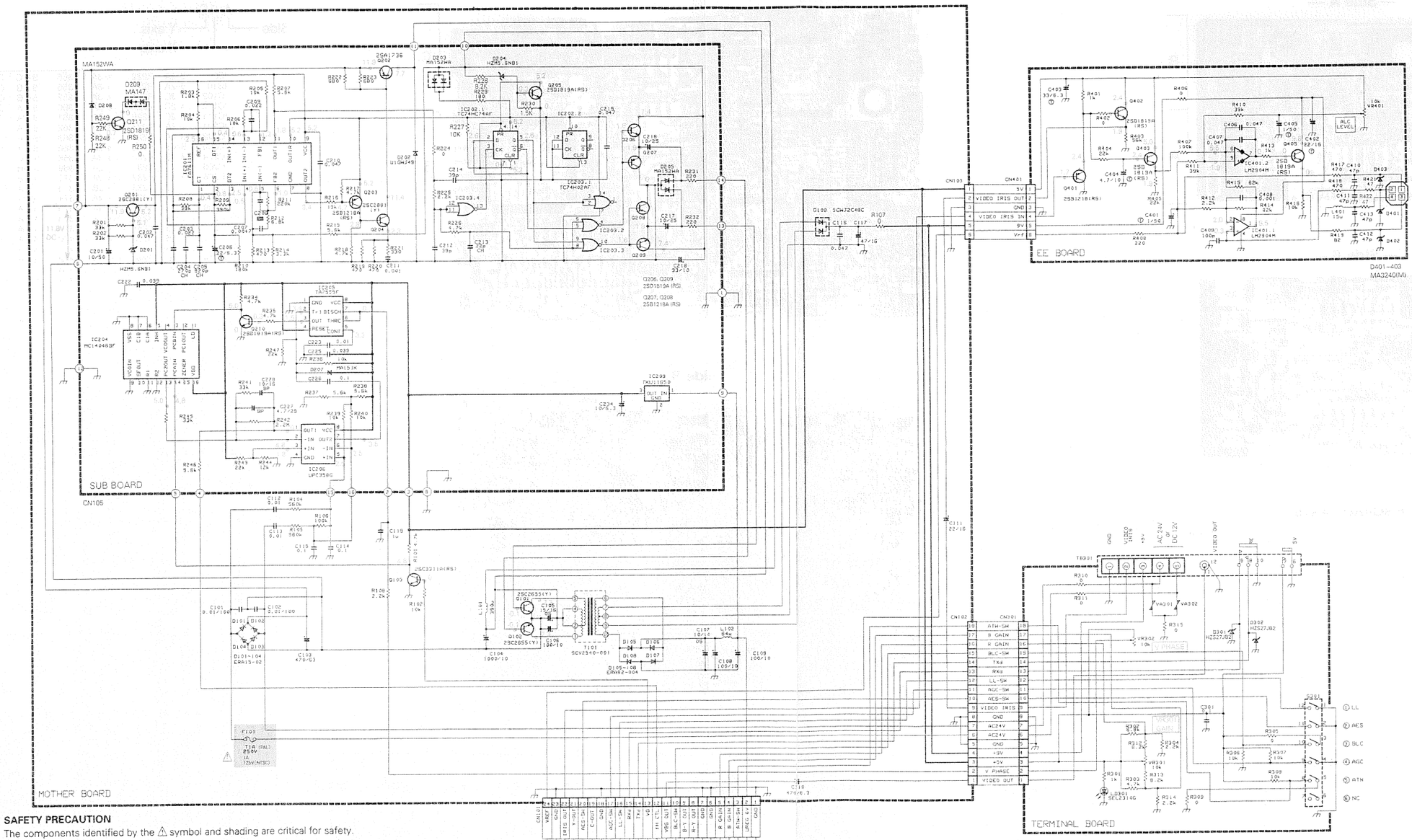
Side — A–1C — Y axis / X axis

IC3	B-2A	R222	A-3A	R355	B-3C	C249	B-3B
IC10	B-2A	R223	A-3A	R356	B-2B	C251	B-1C
IC102	A-3C	R224	A-3A	R357	B-2B	C252	B-1C
IC110	A-2C	R225	B-3A	R360	B-2A	C253	B-1C
IC111	A-2C	R226	A-3A	R361	B-2A	C254	B-1B
IC201	A-3A	R227	B-3A	R362	B-2A	C255	B-1B
IC202	B-4A	R228	A-3A	R363	B-2A	C256	B-1B
IC203	B-4B	R229	B-3A	R366	B-2A	C257	B-1B
IC204	B-3B	R230	B-3A	R368	A-4C	C258	B-3C
IC205	B-1C	R231	B-2A	R369	A-4B	C259	B-3B
IC206	B-1C	R232	B-2A	R372	A-4B	C260	B-3C
IC207	A-1B	R233	B-2B	R373	A-4A	C261	B-3C
IC208	B-1A	R234	A-4A	R374	B-1A	C262	A-4B
IC209	A-1C	R235	A-4A	R375	B-1A	C263	A-4B
IC210	B-1B	R236	A-3A	R376	A-3A	C264	A-4B
IC211	A-2B	R237	A-4A	R377	A-3A	C265	A-4B
IC212	B-1B	R238	A-4A	R400	B-2A	C266	B-2B
IC213	B-1B	R239	A-4A	R401	B-2A	C267	B-2B
IC214	B-4C	R240	B-3A	R402	B-2A	C268	B-2B
IC215	B-4C	R241	A-4A	R403	A-2B	C269	A-2A
IC216	B-4C	R242	A-4A	R404	B-1A	C270	A-4A
IC217	B-4C	R243	A-3A	R405	B-2B	C272	A-3A
IC218	B-4B	R244	B-3A			C280	A-4C
IC219	B-3C	R245	A-4A	C6	A-2A	C281	B-4C
IC220	B-2B	R246	A-4A	C7	B-2A	C282	A-4C
IC221	B-4A	R247	B-3B	C8	B-2A	C283	A-3C
IC222	B-1A	R248	A-1C	C9	A-1A	C284	B-3C
IC223	B-2A	R249	A-2C	C20	A-2A	C285	A-3B
IC224	B-2A	R250	B-2C	C21	B-2A	C288	B-3C
		R251	B-2C	C22	A-2A	C289	A-4A
Q111	B-3C	R252	B-1C	C23	B-2A	C290	A-4A
Q201	B-4A	R253	B-1C	C140	A-2C	C292	B-4A
Q202	B-3B	R254	B-1C	C141	B-2C	C293	A-4A
Q203	B-4B	R255	A-1C	C142	A-2C	C294	A-4A
Q204	A-3B	R256	A-1C	C143	B-2C	C295	B-4B
Q205	B-3A	R257	B-1C	C144	A-2C	C296	B-2B
Q206	A-3B	R258	B-1C	C145	A-2C	C297	B-1A
Q207	A-3A	R259	A-1C	C146	A-4C	C300	A-2A
Q208	A-3A	R260	A-1C	C147	B-4C	C301	A-4C
Q209	B-2C	R261	A-1C	C148	A-3C	C302	A-4B
		R262	A-1C	C149	A-3C	C303	A-4A
D111	B-2C	R264	A-2C	C150	B-2C	C304	A-4B
D112	A-2C	R265	A-2C	C151	B-2C	C305	A-4B
D201	B-1B	R266	A-2C	C152	A-4B	C306	B-2A
		R267	B-3C	C156	A-3C	C307	A-2A
R127	A-4C	R268	B-3C	C157	B-4C	C400	A-2A
R128	B-4C	R269	B-3C	C158	A-3B	C401	A-3B
R129	B-3C	R270	B-1C	C159	B-3C	C402	B-4B
R130	A-4B	R271	B-1C	C160	B-2C		
R131	A-4B	R272	A-1C	C201	B-3A	L2	B-3C
R132	A-4B	R273	B-1C	C202	B-3A	L10	B-4A
R136	B-3C	R274	B-1C	C203	B-3A	L11	B-2B
R140	B-3C	R275	B-1C	C204	B-3A	L12	A-1A
R141	B-3C	R276	B-1C	C205	B-3A	L13	B-2B
R143	B-3C	R277	A-1C	C206	B-3A	L14	B-3A
R144	B-3C	R278	A-1C	C207	A-3A	L15	A-1C
R145	A-3C	R279	A-1C	C208	B-3A	L101	B-2C
R148	B-2C	R282	B-3B	C209	A-3A	L201	B-3A
R149	A-3C	R283	B-3B	C210	B-3A		
R152	A-2C	R284	B-3B	C211	B-3A	TP201	B-4B
R153	B-2C	R285	B-3B	C212	B-4B	TP202	B-2C
R154	B-2C	R286	B-3B	C213	A-4A		
R155	A-3C	R291	B-4B	C214	A-4A	CN201	A-4B
R156	A-3C	R292	B-4B	C215	A-4A	CN202	A-2A
R157	B-2C	R295	B-4B	C216	A-4A		
R159	A-4C	R296	B-4B	C217	B-4A	RA150	A-3C
R162	B-3C	R302	B-2B	C218	B-3A	RA151	A-4C
R163	A-3B	R303	B-2B	C219	B-3B	RA250	B-3B
R164	A-3B	R304	B-2B	C220	B-3B	RA251	B-3B
R165	A-3B	R305	B-2B	C221	A-3B	RA252	B-3B
R170	A-3C	R314	B-4C	C222	B-3A	RA253	B-3B
R171	A-3C	R320	B-1B	C223	B-4A	RA254	B-4B
R172	B-2C	R321	B-1C	C224	A-3B	RA255	B-4B
R175	A-4C	R322	B-1C	C225	A-4B	RA256	B-4B
R176	A-4C	R323	A-1A	C226	A-4B	RA257	B-4B
R199	A-3C	R329	B-2B	C227	B-4B	RA258	B-4B
R201	A-4A	R330	B-1B	C228	A-4A	RA259	B-4B
R202	A-4A	R331	B-2B	C229	A-4A	RA260	B-4B
R203	A-4A	R332	B-2B	C230	A-4A	RA261	B-4C
R204	A-4A	R333	B-2B	C231	A-4A	RA262	B-4C
R205	B-4A	R334	A-4C	C232	A-4A	RA263	B-4C
R206	B-3A	R335	B-4C	C233	A-2C	RA280	B-2C
R207	A-3B	R336	B-3C	C234	A-1C	RA301	A-2B
R208	A-3B	R337	B-4C	C235	A-1C	RA302	B-1A
R209	A-4B	R338	A-4C	C236	B-1B	RA303	B-1B
R210	B-4B	R339	A-4C	C237	B-3B	RA304	A-1C
R211	A-4B	R340	A-4C	C238	B-3B	RA305	A-1C
R212	B-4B	R341	A-4C	C239	B-3C	RA306	B-1B
R213	B-3B	R342	A-4C	C240	B-3B	RA307	B-1A
R214	B-3A	R343	B-4C	C241	B-3B		
R215	B-2B	R344	A-4C	C242	B-3B	LC201	B-4A
R216	B-3B	R345	B-4C	C243	B-3B	LC202	B-4A
R217	B-3B	R349	A-1A	C244	A-3C		
R218	A-3B	R350	B-1B	C245	A-1A	X101	A-3C
R219	B-3B	R351	B-1B	C246	B-2C	X201	A-1C
R220	B-3A	R352	B-3C	C247	B-1C		
R221	B-3A	R354	B-3C	C248	A-1C		

Chip parts pin arrangement (Top view)



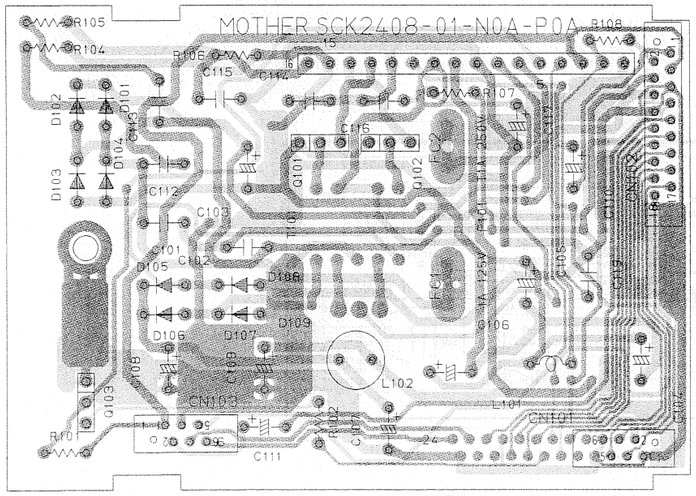
3.5 MOTHER/SUB/TER/EE BOARD SCHEMATIC DIAGRAM (TK-C600)



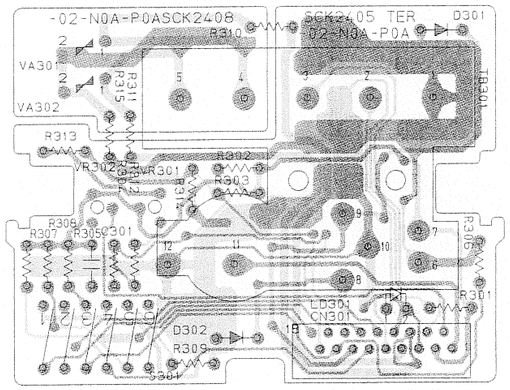
● **SAFETY PRECAUTION**

The components identified by the ⚠ symbol and shading are critical for safety.
For continued safety replace safety critical components only with manufactures recommended parts.

3.6 MOTHER CIRCUIT BOARD (TK-C600)



3.7 TER CIRCUIT BOARD (TK-C600)



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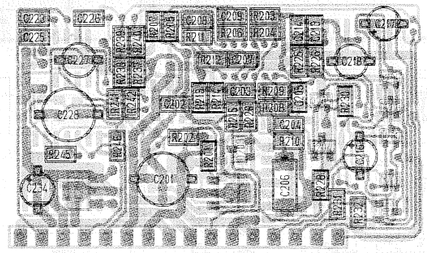
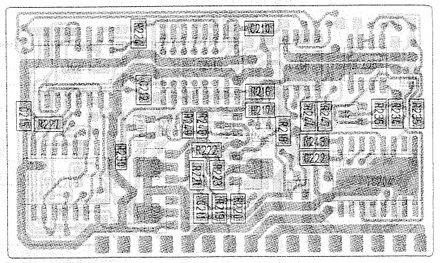
3.8 SUB CIRCUIT BOARD (TK-C600)

— Side A —

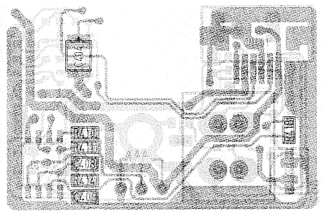


— Side B —

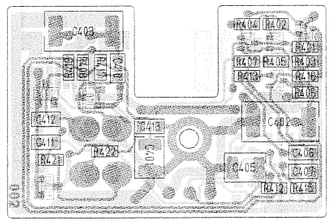


3.9 EE CIRCUIT BOARD

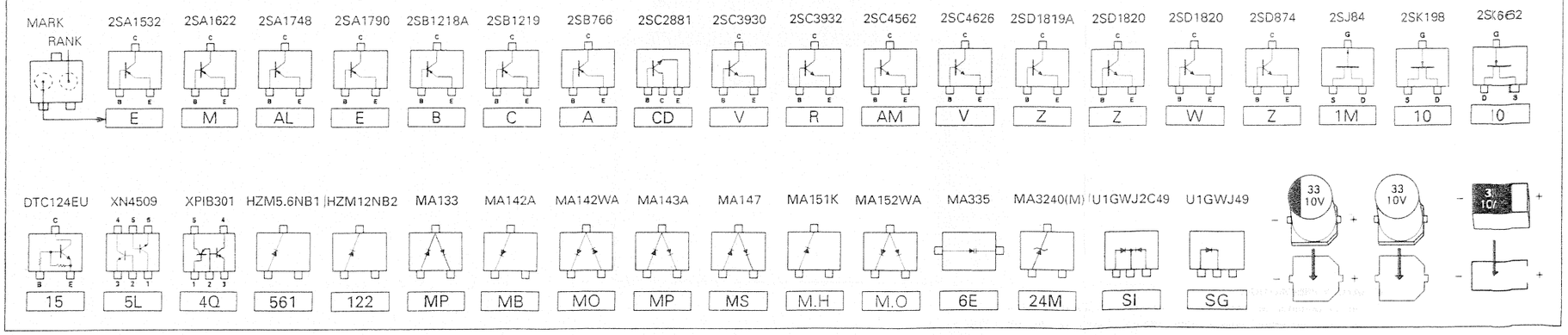
— Side A —



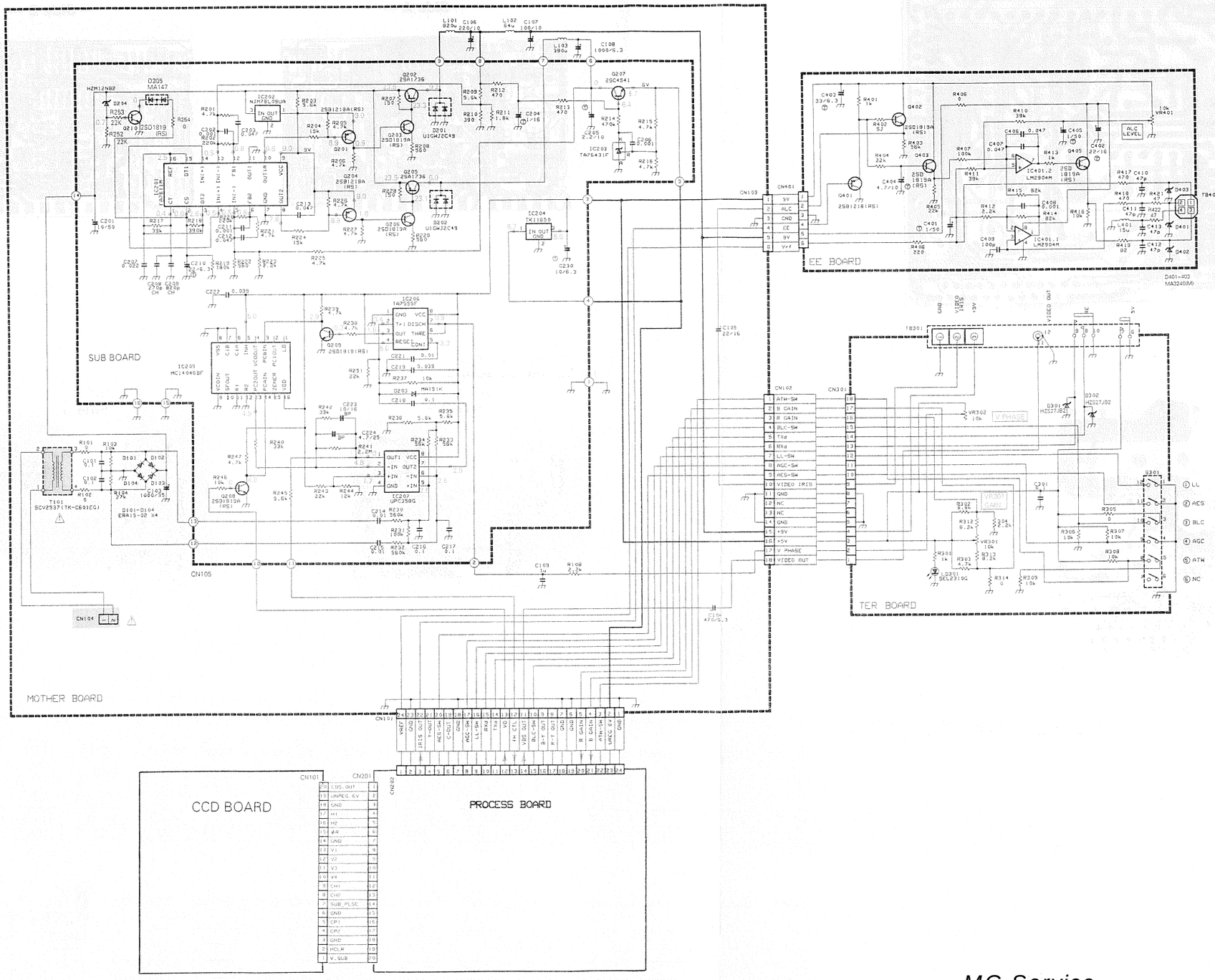
— Side B —



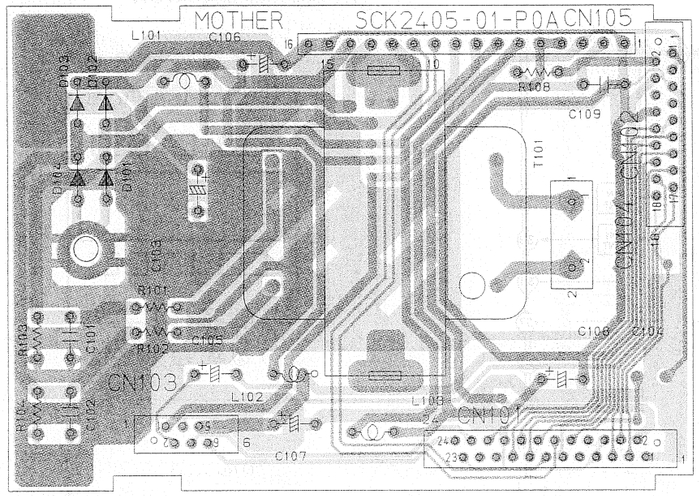
Chip parts pin arrangement (Top view)



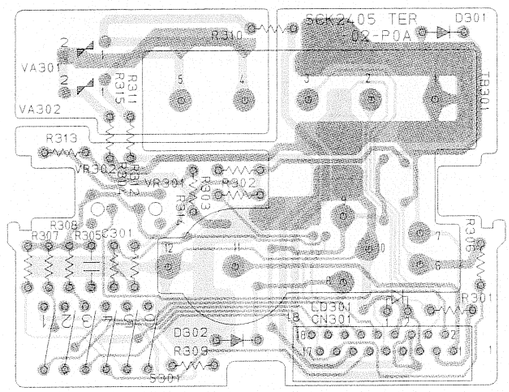
3.10 MOTHER/SUB/TER/EE BOARD SCHEMATIC DIAGRAM (TK-C601EG)



3.11 MOTHER CIRCUIT BOARD (TK-C601EG)

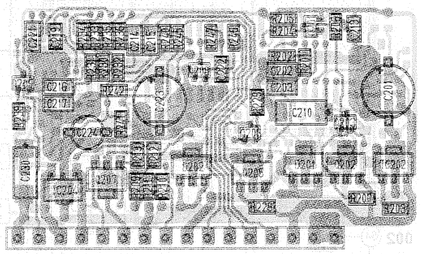


3.12 TER CIRCUIT BOARD (TK-C601EG)

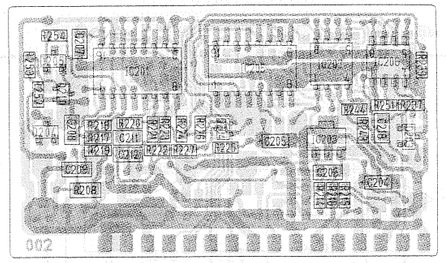


3.13 SUB CIRCUIT BOARD (TK-C601EG)

— Side A —

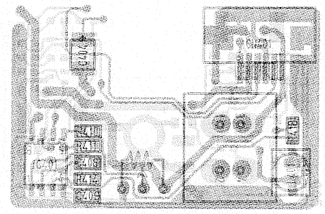


— Side B —

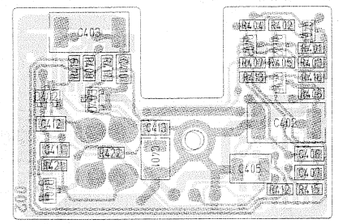


3.14 EE CIRCUIT BOARD (TK-C601EG)

— Side A —



— Side B —



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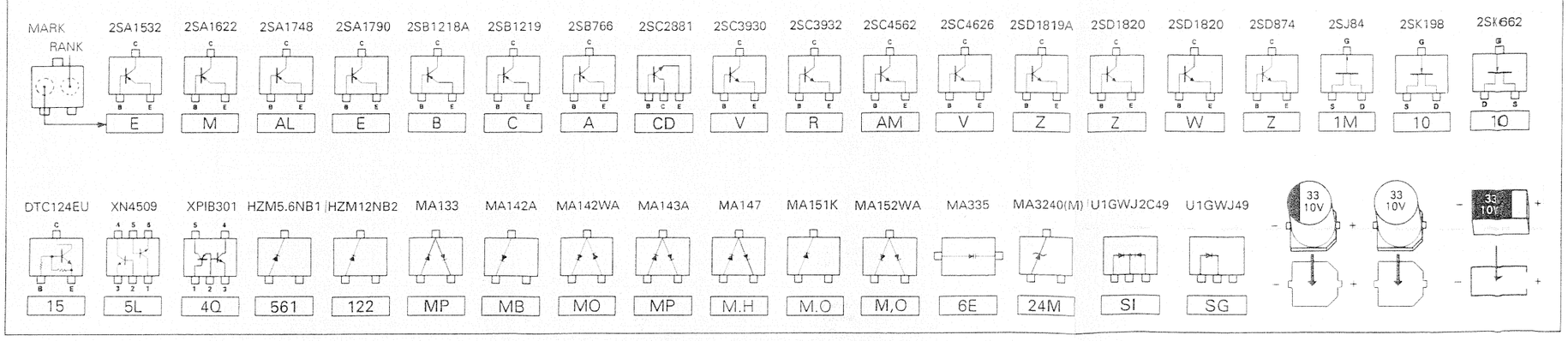
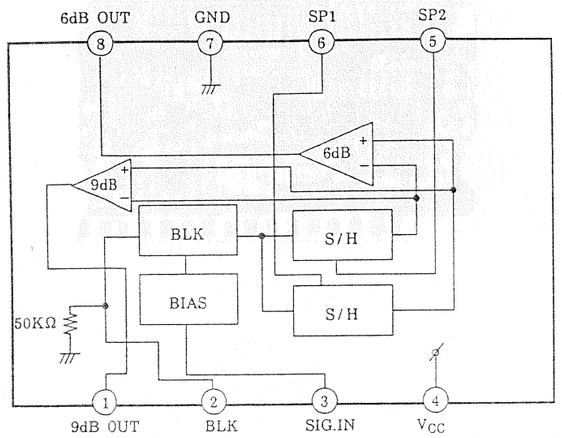
Chip parts pin arrangement (Top view)

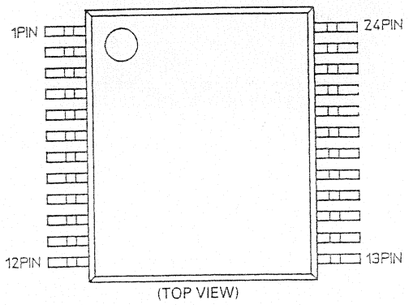


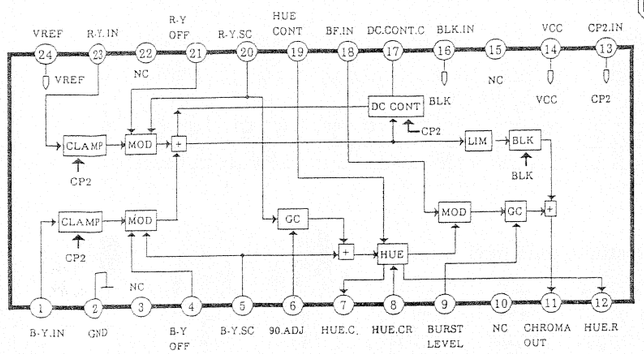
3.15 SCHEMATIC DIAGRAMS OF IC's

■ AN2018S 【MATSUSHITA】
(Correlated Double Sampling)

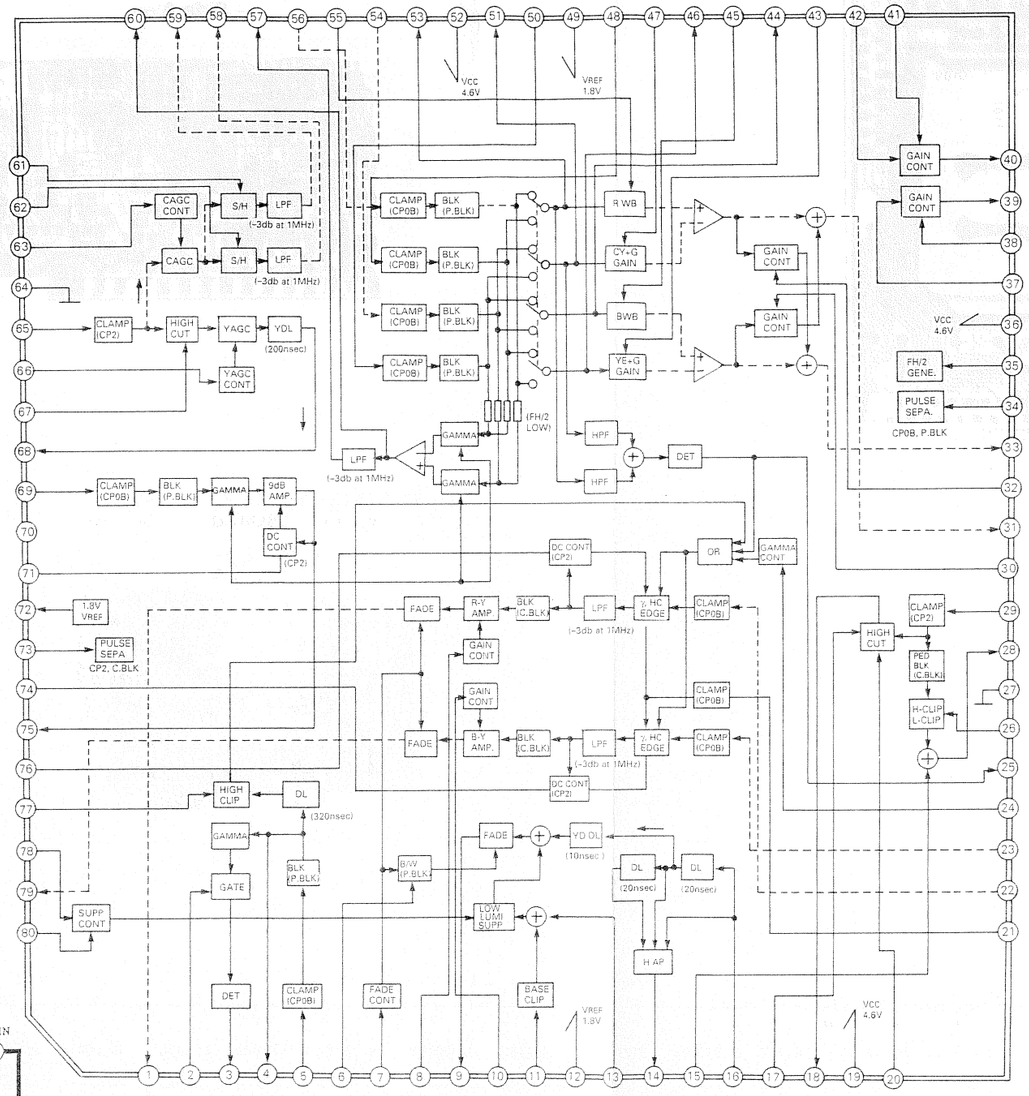


■ AN2458SH 【MATSUSHITA】
(Color Encoder)





■ AN2145NFHP 【MATSUSHITA】
(Signal Processor)

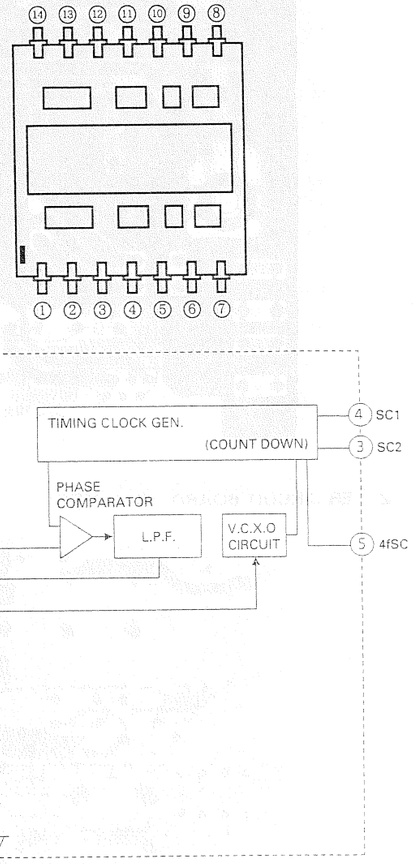


(Pin function)

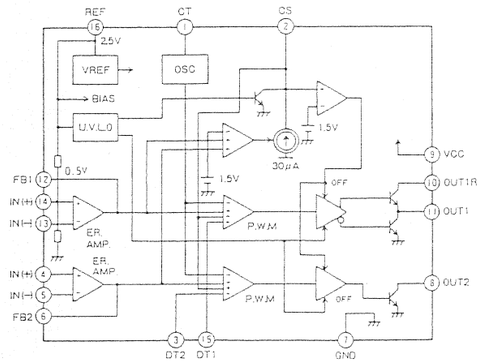
Pin No.	Function	Pin No.	Function
1	R-Y · OUT	21	DCLAMP
2	WBLK · IN	22	R-Y · IN
3	IRIS · OUT	23	B-Y · IN
4	BLK · OUT	24	CGAM · CONT
5	IRIS · IN	25	EDGE · TEST
6	BW · FADE	26	PED · SET
7	FADE · IN	27	GND1
8	R-Y · GAIN	28	Y · OUT
9	FADE · OUT	29	Y · IN
10	B-Y · GAIN	30	R-Y · MAT
11	VAP · IN	31	RG · OUT
12	VREF1(TYP. 1.8V IN)	32	B-Y · MAT
13	HAP · IN	33	BG · OUT
14	HAP · OUT	34	DRIVE · IN(CP0B, P.BLK)
15	SYNC · IN	35	FH2 · IN
16	DL · IN	36	V_{CC2}(TYP. 4.6V)
17	CHROMA · CLIP	37	CY1 · IN
18	CHROMA · OUT	38	CY1 · GAIN
19	V_{CC1}(TYP. 4.6V)	39	CY1 · OUT
20	CHROMA · IN	40	YE1 · OUT

Pin No.	Function	Pin No.	Function
41	YE1 · GAIN	61	SP1 · IN
42	YE1 · IN	62	SP2 · IN
43	YE+G · GAIN	63	CAGC · CONT
44	CY+MG · OUT	64	GND2
45	BWB · GAIN	65	SIG · IN
46	YE+G · OUT	66	YAGC · CONT
47	CY+G · GAIN	67	HC · CONT
48	YE2 · IN	68	YAGC · OUT
49	VREF2(TYP. 1.8V IN)	69	GAM · IN
50	CY2 · IN	70	KNEE · CONT
51	CY+G · OUT	71	YDC · CONT
52	V_{CC3}(TYP. 4.6V)	72	VREF3(TYP. 1.8V OUT)
53	YE+MG · OUT	73	SSG · IN(CP2, C.BLK)
54	CY0 · IN	74	BDC · CONT
55	RWB · GAIN	75	GAM · OUT
56	YE0 · IN	76	RDC · CONT
57	VAP · OUT	77	HIGH · CLIP
58	CY · OUT	78	SUPP · CONT
59	YE · OUT	79	B-Y · OUT
60	VAP · TEST	80	SUPP · SET

■ EHDGA1533 【MATSUSHITA】
(SC Generator for NTSC)



■ FA7611M 【FUJI ELECTRIC】
(Switching Regulator Control)



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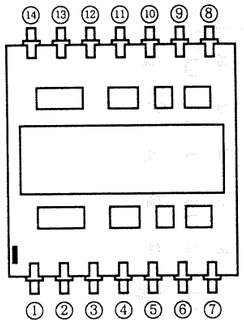
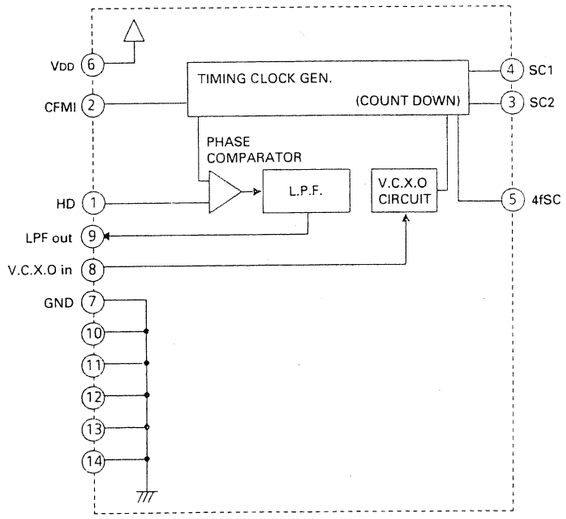
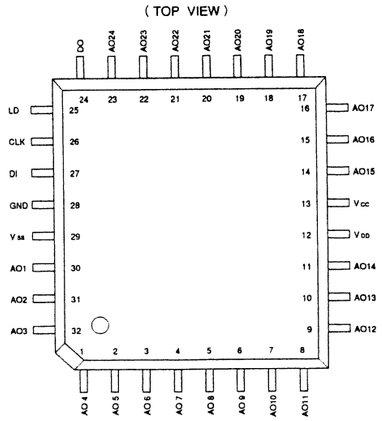
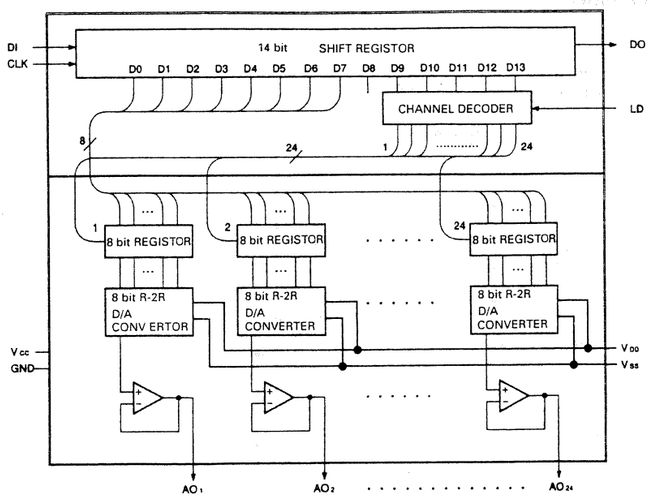
■ EHDGA1534 【MATSUSHITA】
(SC Generator for PAL)



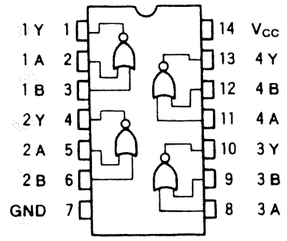


■ MB88345PF 【FUJITSU】
(D/A Converter)


(TOP VIEW)
DO AO24 AO23 AO22 AO21 AO20 AO19 AO18
LD CLK DI GND Vss AO1 AO2 AO3
AO17 AO16 AO15 Vcc Vdd AO14 AO13 AO12
AO4 AO5 AO6 AO7 AO8 AO9 AO10 AO11



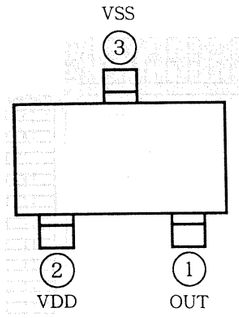
■ MC74HC02AF 【MOTOROLA】
(Quad 2-Input NOR Gates)

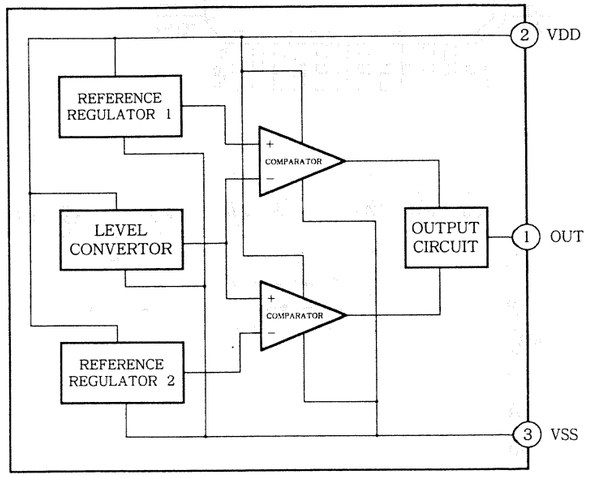


TRUE Table

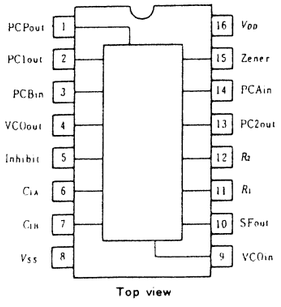
A	B	Y
L	L	H
L	H	L
H	L	L
H	H	L

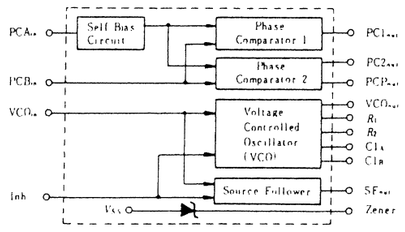
■ MN12821(QR) 【MATSUSHITA】
(Voltage Detecter)



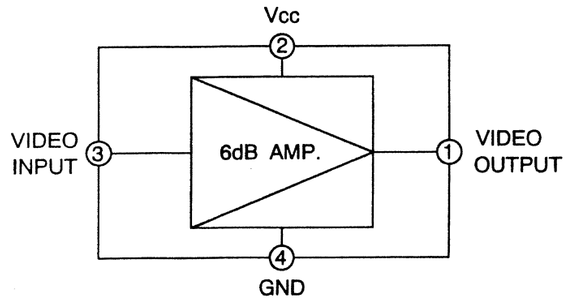


■ MC14046BF 【MOTOROLA】
(Phase Locked Loop)



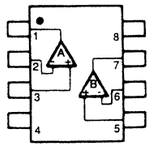


■ MM1031XMR 【MITSUMI】
(6dB Amp)



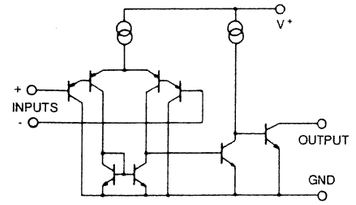
■ NJM2903V 【JRC】
(Dual Single Supply Comparator)

D, M Type
(Top View)

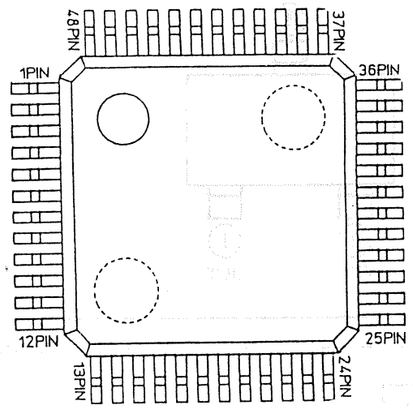


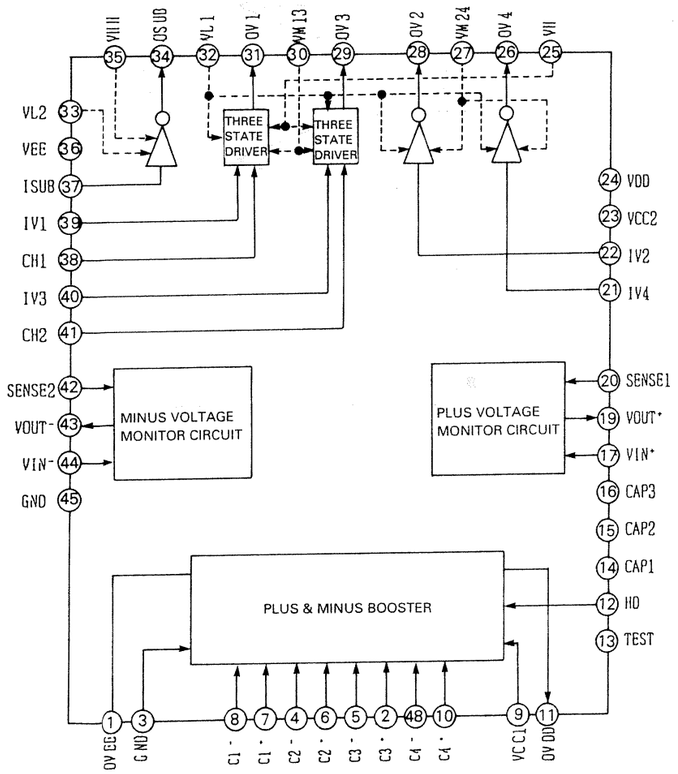
Pin Assignment

1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. GND
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V+

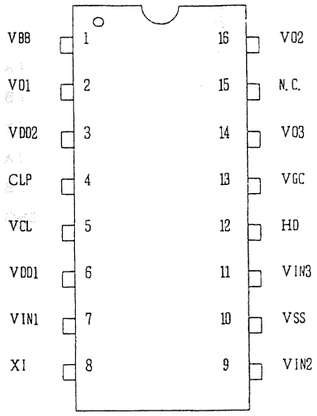


■ MN3111H 【MATSUSHITA】
(Vertical Driver)

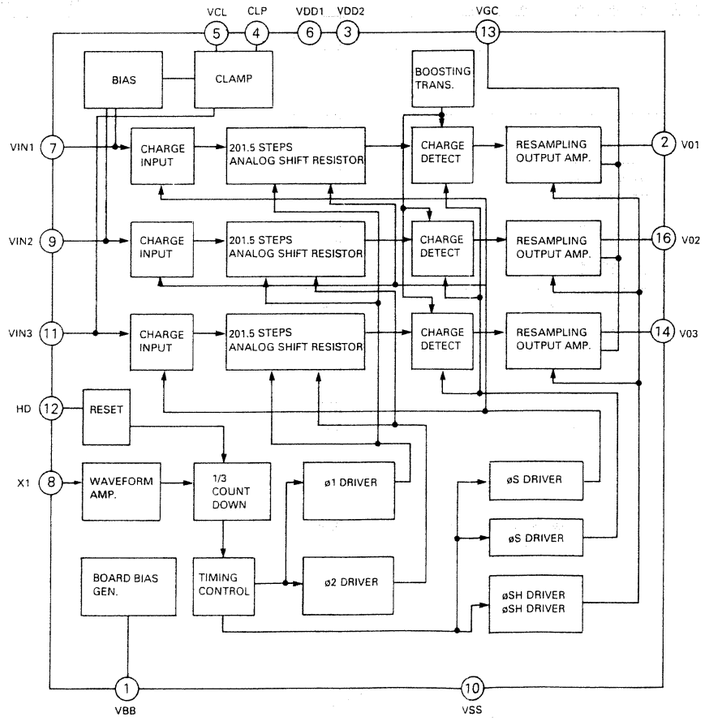




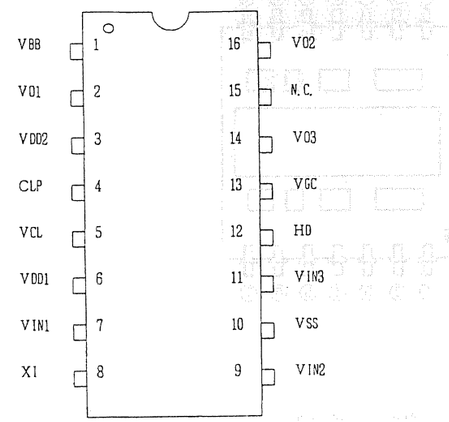
■ MN3860SA 【MATSUSHITA】
(CCD Delay Line for NTSC)



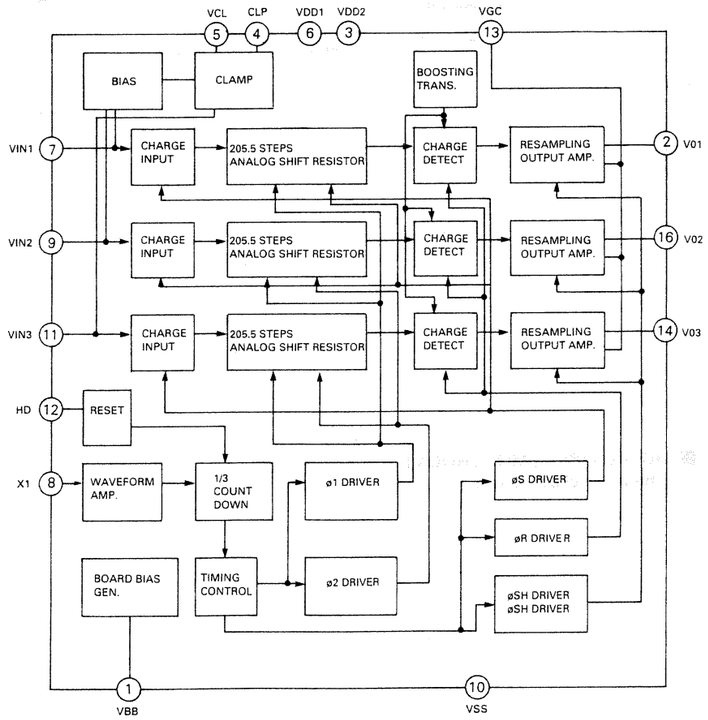
(TOP VIEW)



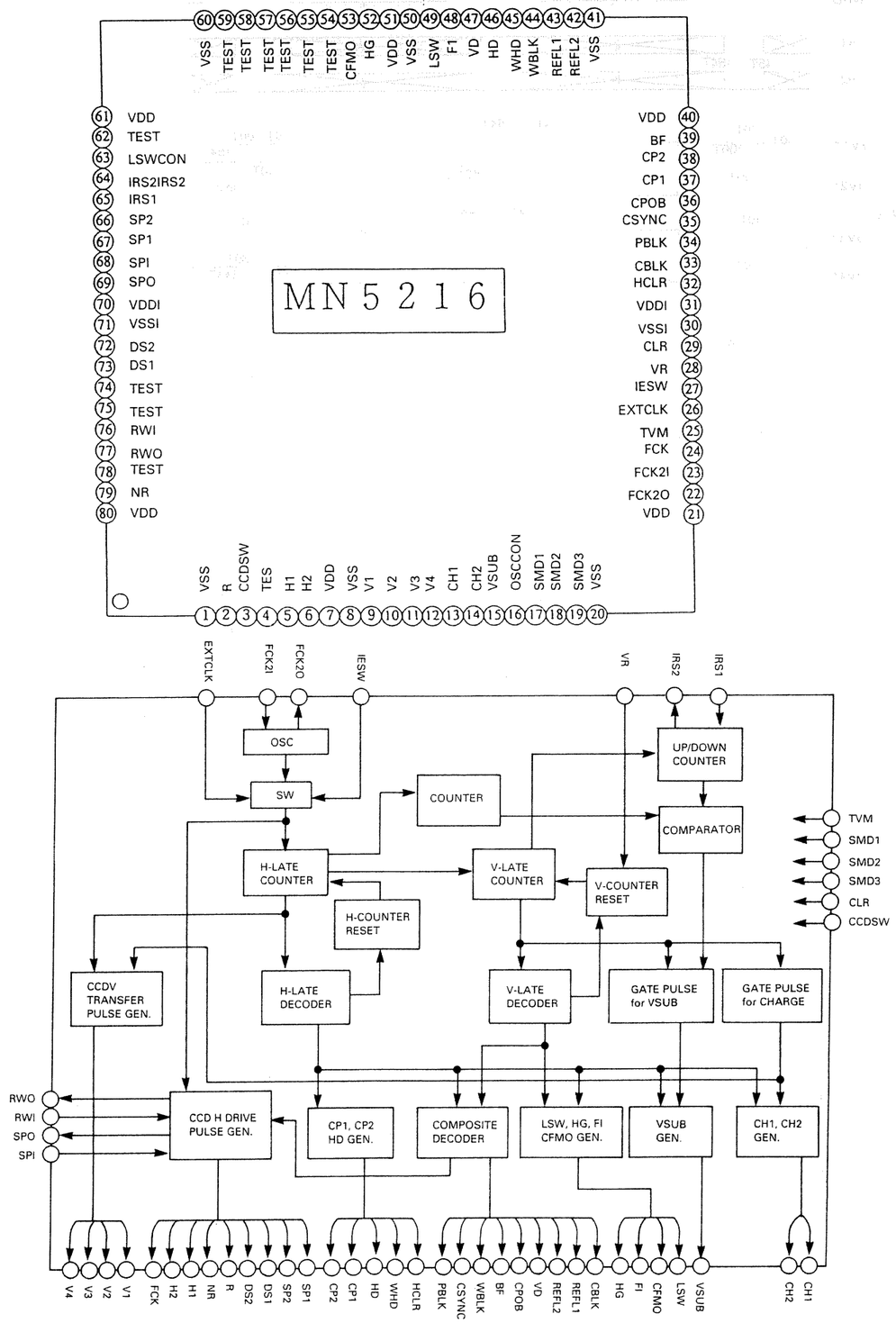
■ MN3861SA 【MATSUSHITA】
(CCD Delay Line for PAL)



(TOP VIEW)



■ MN5216 【MATSUSHITA】
(Timing Generator)

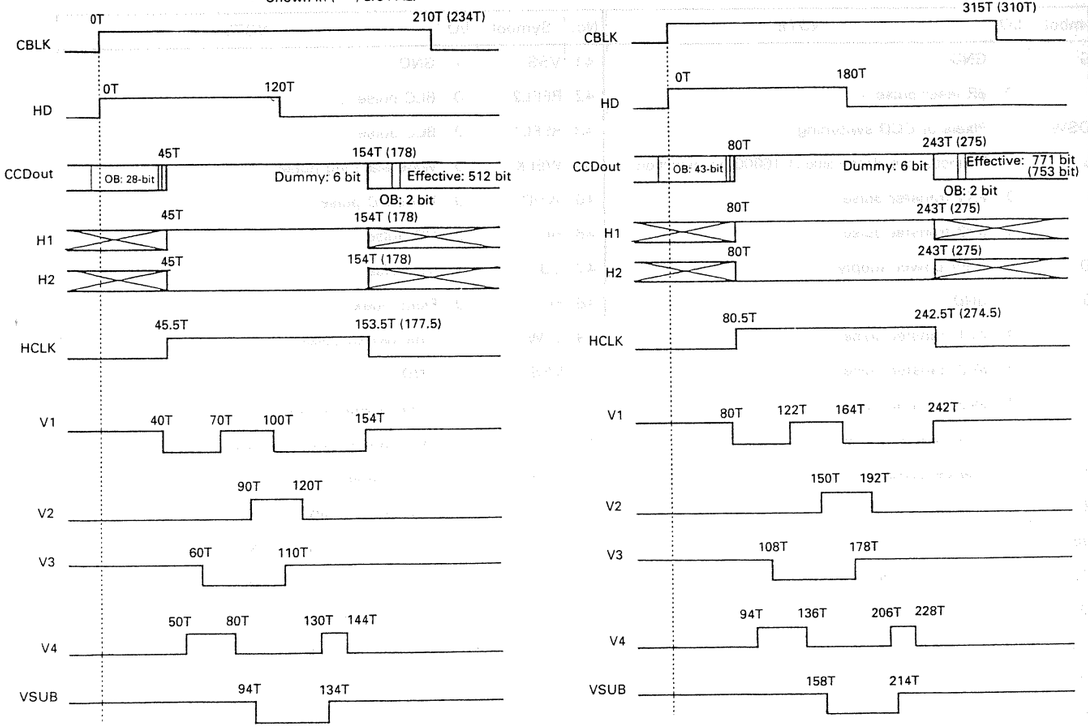


Pin function

No.	Symbol	I/O	NOTE	No.	Symbol	I/O	NOTE
1	VSS	I	GND	41	VSS	I	GND
2	R	O	ϕR reset pulse 1	42	REFL2	O	BLC pulse 2
3	CCDSW	I	Pixels of CCD switching	43	REFL1	O	BLC pulse 1
4	TES	I	Restrict accumulation time (1/16000sec restriction: H)	44	WBLK	O	Wide blanking pulse
5	H1	O	ϕH1 transfer pulse	45	WHD	O	Wide HD pulse
6	H2	O	ϕH2 transfer pulse	46	HD	O	HD pulse
7	VDD	I	+5V power supply	47	VD	O	VD pulse
8	VSS	I	GND	48	FI	O	Field index
9	V1	O	ϕV1 transfer pulse	49	LSW	O	Line switch pulse
10	V2	O	ϕV2 transfer pulse	50	VSS	I	GND
11	V3	O	ϕV3 transfer pulse	51	VDD	I	+5V power supply
12	V4	O	ϕV4 transfer pulse	52	HG	O	Distinguish color line output
13	CH1	O	Charge pulse 1	53	CFMO	O	Color flame output
14	CH2	O	Charge pulse 2	54	TEST	I	Test pin (Usually: OPEN)
15	VSUB	O	VSUB pulse	55	TEST	I	Test pin (Usually: OPEN)
16	OSCCON	O	INT. OSCCON: Hi−Z EXT. OSCCON: L	56	TEST	I	Test pin (Usually: OPEN)
17	SMD1	I	Shutter mode 1	57	TEST	I	Test pin (Usually: OPEN)
18	SMD2	I	Shutter mode 2	58	TEST	I	Test pin (Usually: OPEN)
19	SMD3	I	Shutter mode 3	59	TEST	I	Test pin (Usually: OPEN)
20	VSS	I	GND	60	VSS	I	GND
21	VDD	I	+5V power supply	61	VDD	I	+5V power supply
22	FCK2O	O	Crystal oscillation output	62	TEST	O	Test pin (Usually: OPEN)
23	FCK2I	I	Crystal oscillation input	63	LSWCON	I	Line switch control input
24	FCK	O	FCK clock output	64	IRS2	I	Iris control input 2
25	TVM	I	TV mode	65	IRS1	I	Iris control input 1
26	EXTCLK	I	EXT. clock input (Not used: L or OPEN)	66	SP2	O	Sampling pulse 2
27	IESW	I	INT./EXT. sync switching	67	SP1	O	Sampling pulse 1
28	VR	I	VR reset pulse input	68	SPI	I	ADJ. SP phase input
29	CLR	I	Clear input (Usually: H or OPEN)	69	SPO	O	ADJ. SP phase output
30	VSSI	I	GND for INT. cell	70	VDDI	I	Power supply for INT. cell
31	VDDI	I	Power supply for INT. cell	71	VSSI	I	GND for INT. cell
32	HCLR	O	ϕH clear pulse	72	DS2	O	CDS pulse 2
33	CBLK	O	Composite blanking	73	DS1	O	CDS pulse 1
34	PBLK	O	Pre-blanking pulse	74	TEST	O	Test pin (Usually: OPEN)
35	CSYNC	O	Composite sync	75	TEST	O	Test pin (Usually: OPEN)
36	CPOB	O	OB clamp pulse	76	RWI	I	ϕR width ADJ. input
37	CP1	O	Clamp pulse 1	77	RWO	O	ϕR width ADJ. output
38	CP2	O	Clamp pulse 2	78	TEST	I	Test pin (Usually: OPEN)
39	BF	O	Birst flag pulse	79	NR	O	ϕR reset pulse 2
40	VDD	I	+5V power supply	80	VDD	I	+5V power supply

1/3-inch CCD DRIVING PULSE H-TIMING (510H)

- 1T=1/2FCK (NTSC: 52.4ns, PAL: 51.8ns)
- Shown in ( ) are PAL.

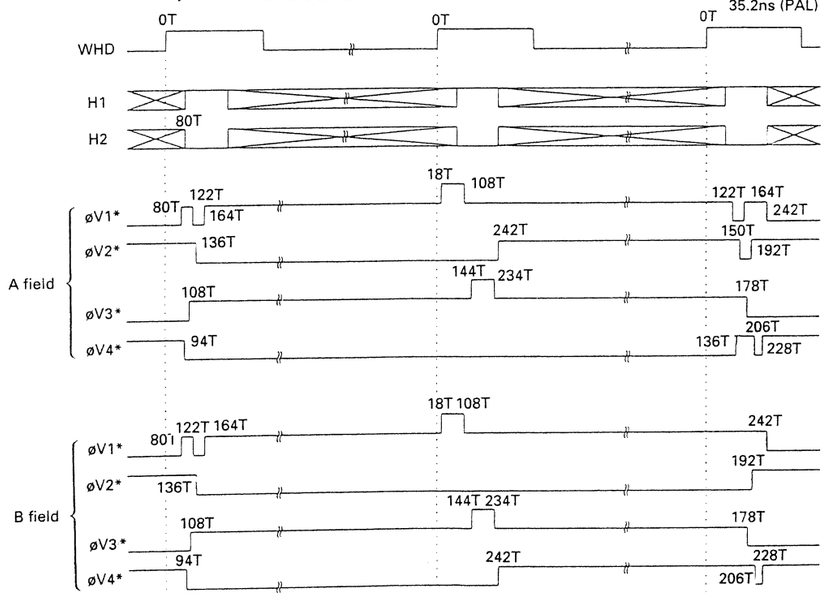


1/3-inch CCD DRIVING PULSE H-TIMING (768H)

- 1T=1/2FCK (NTSC: 34.9ns, PAL: 35.2ns)
- Shown in ( ) are PAL.

1/3-inch DRIVING PULSE V-TIMING (768H)

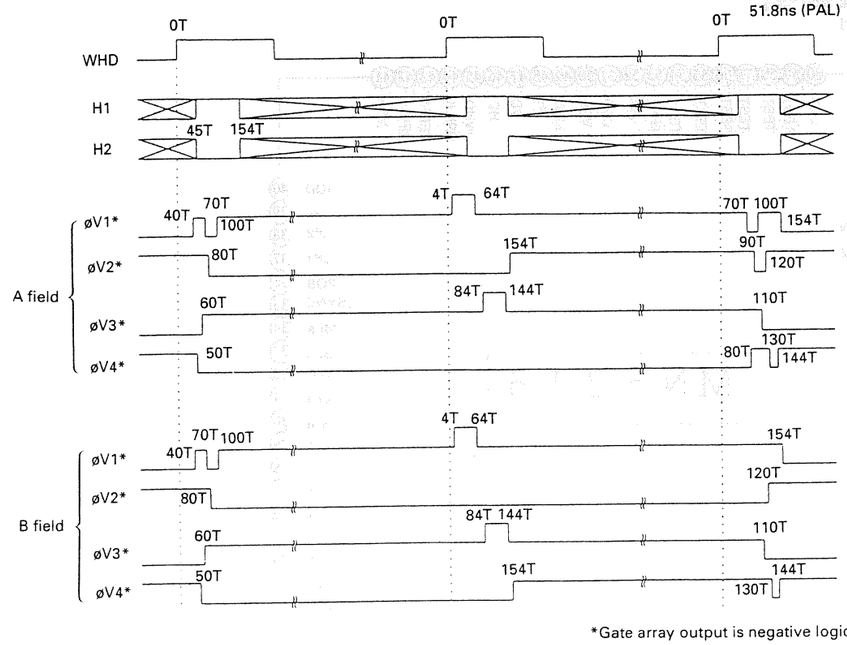
1T=34.9ns (NTSC)
35.2ns (PAL)



*Gate array output is negative logic.

1/3-inch CCD DRIVING PULSE V-TIMING (510H)

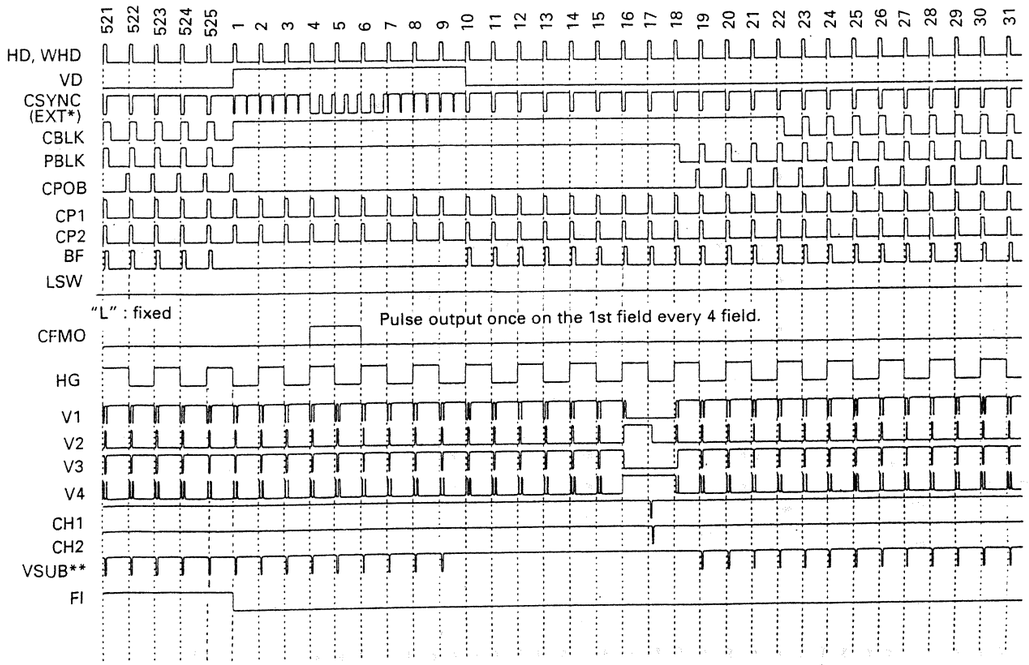
1T=52.4ns (NTSC)
51.8ns (PAL)



*Gate array output is negative logic.

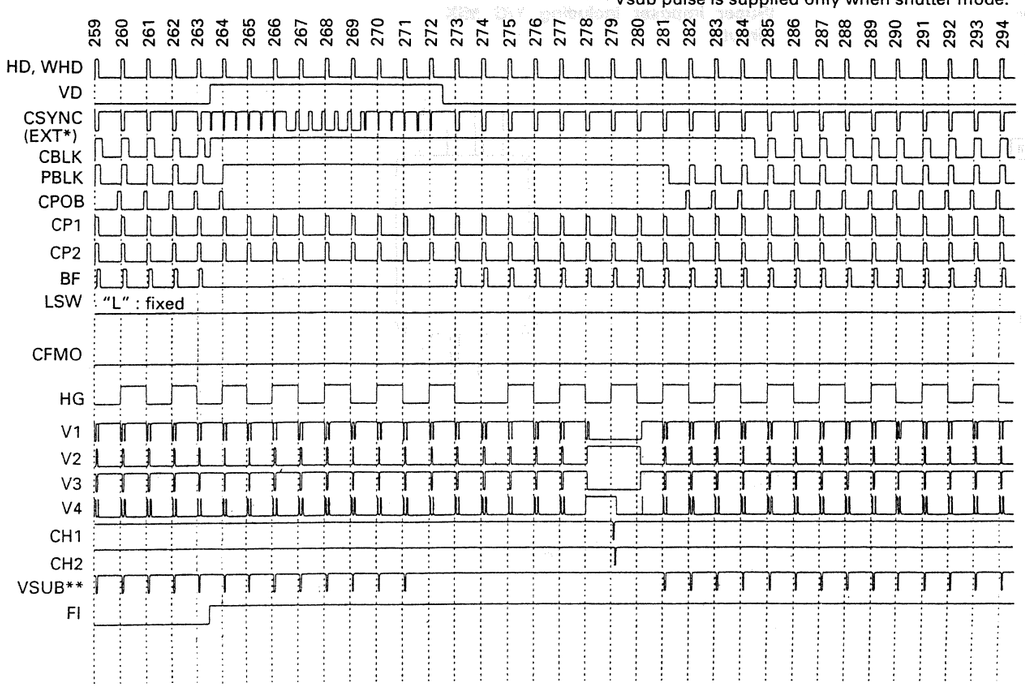
[NTSC] 1/3-inch CCD V-TIMING (1st field)

* Same as EXT. CSYNC when EXT. SYNC mode.
** Vsub pulse is supplied only when shutter mode.



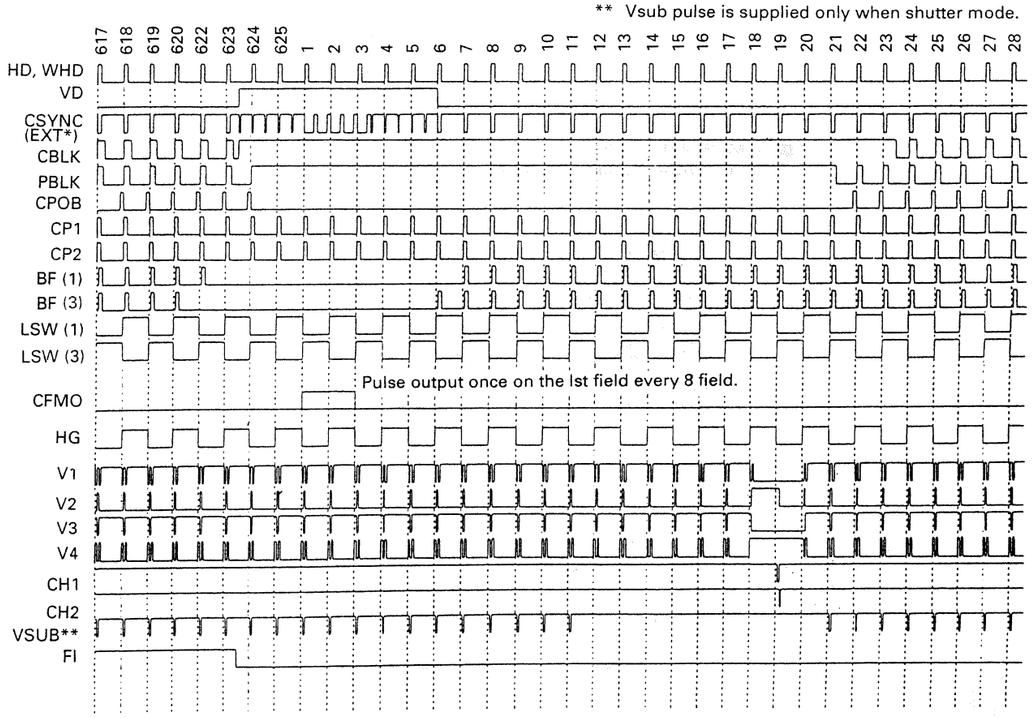
[NTSC] 1/3-inch CCD V-TIMING (2nd field)

* Same as EXT. CSYNC when EXT. SYNC mode.
** Vsub pulse is supplied only when shutter mode.



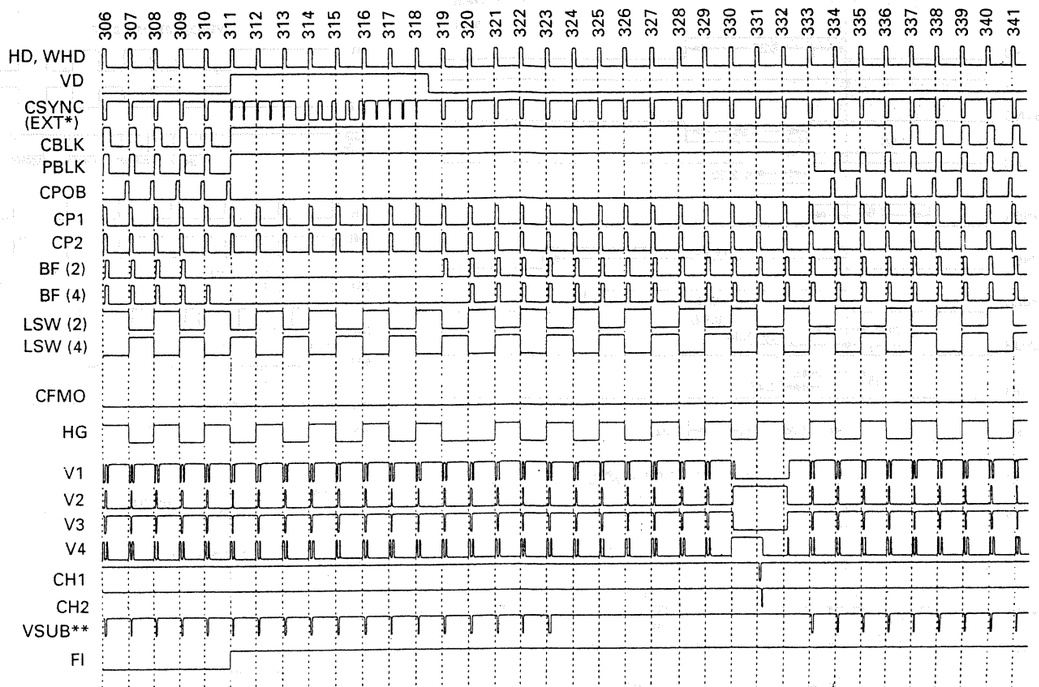
[PAL] 1/3-inch CCD V-TIMING (1st, 3rd field)

* Same as EXT. CSYNC when EXT. SYNC mode.
** Vsub pulse is supplied only when shutter mode.



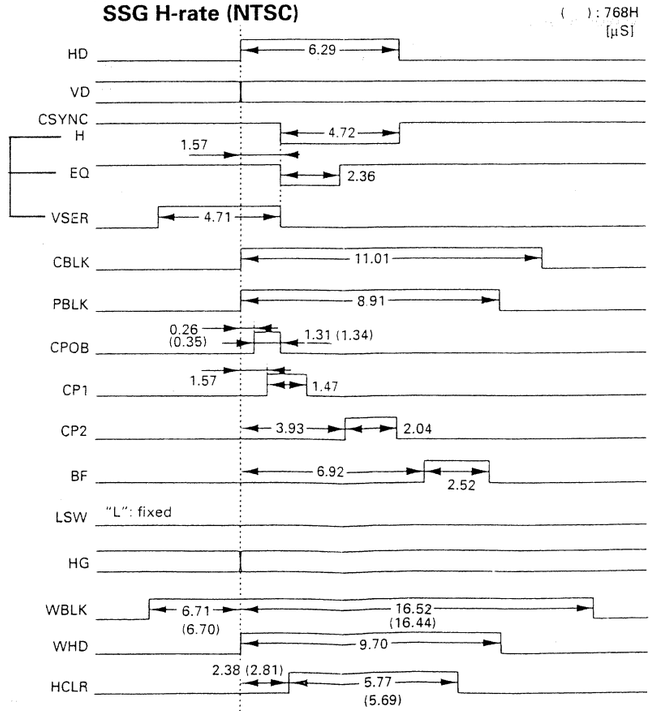
[PAL] 1/3-inch CCD V-TIMING (2nd, 4th field)

* Same as EXT. CSYNC when EXT. SYNC mode.
** Vsub pulse is supplied only when shutter mode.



SSG H-rate (NTSC)

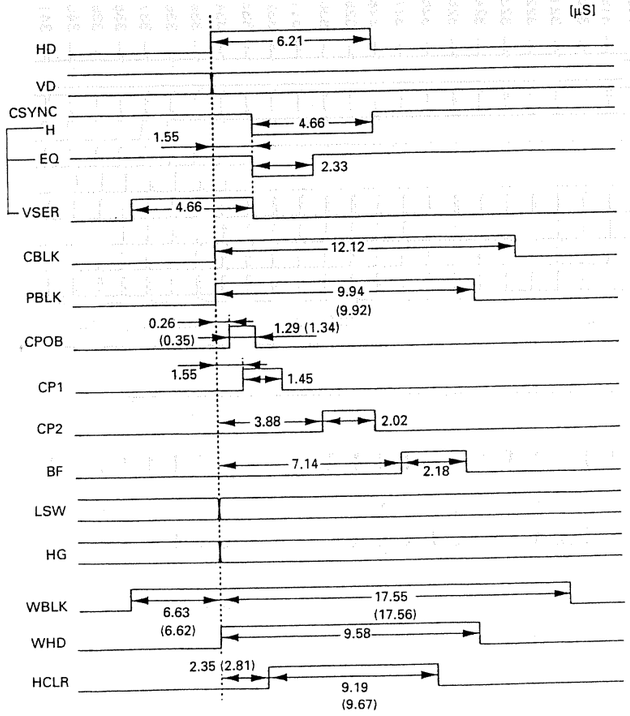
( ) : 768H
[µS]



SSG H-rate (PAL)

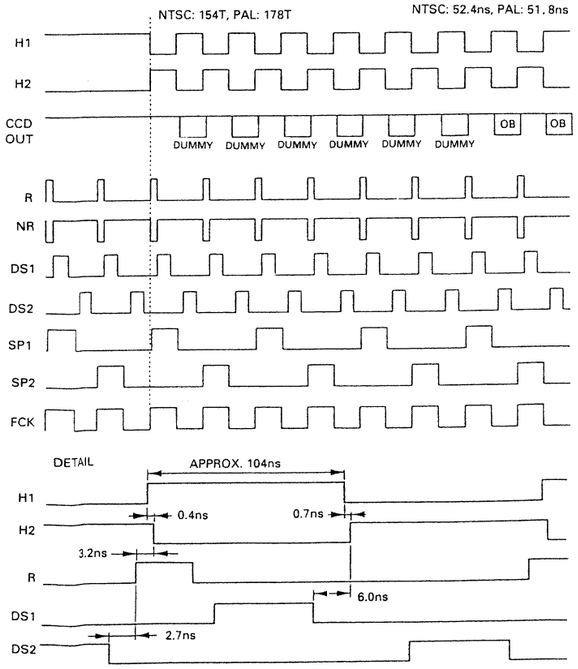
( ) : 768H

[μS]



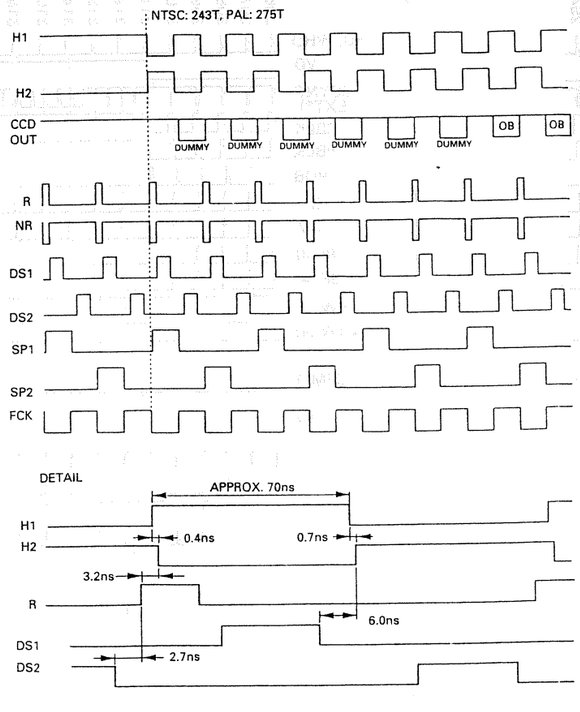
HIGH SPEED PULSE TIMING (510H)

1T=1/2FCK
NTSC: 52.4ns, PAL: 51.8ns



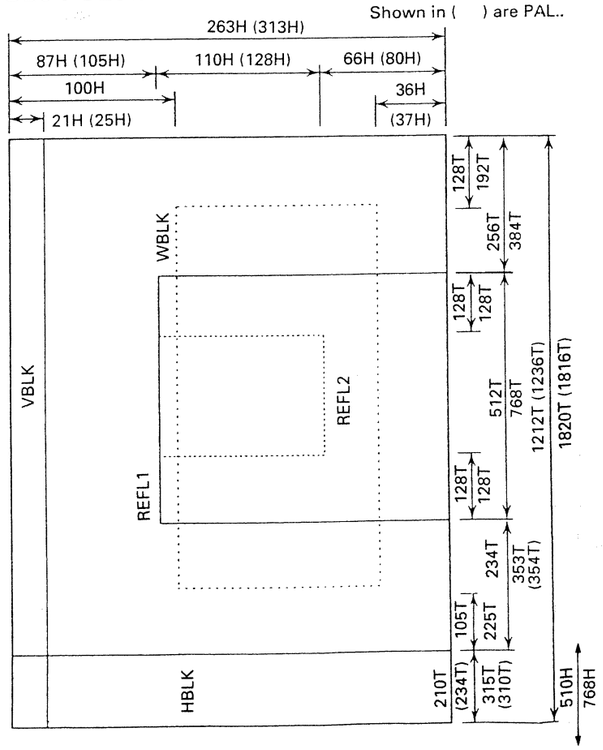
HIGH SPEED PULSE TIMING (768H)

1T=1/2FCK
NTSC: 34.9ns, PAL: 35.2ns

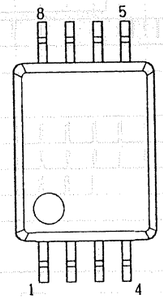


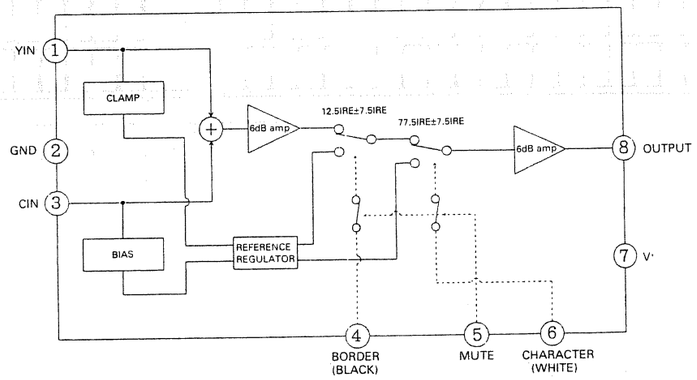
BLC PULSE

Shown in ( ) are PAL..



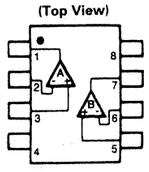
■ NJM2509 【JRC】 (Super Imposer including Y/C MIX Circuit)





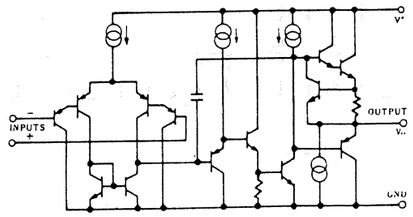
■ NJM2904M 【JRC】 (Dual Single Supply Op.Amp)

D, M Type
(Top View)

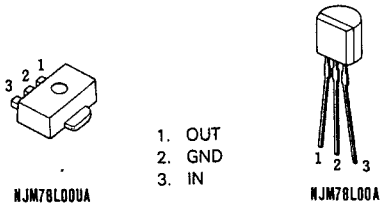


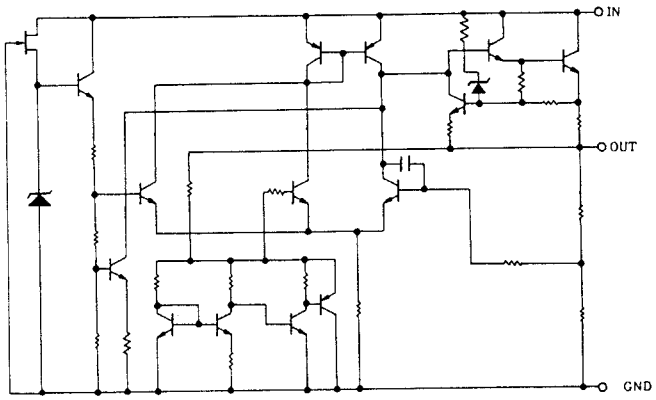
Pin Assignment

1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. GND
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V+

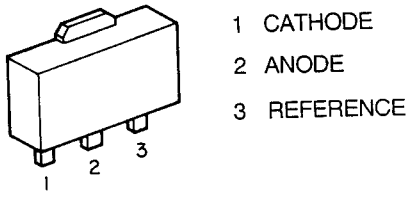


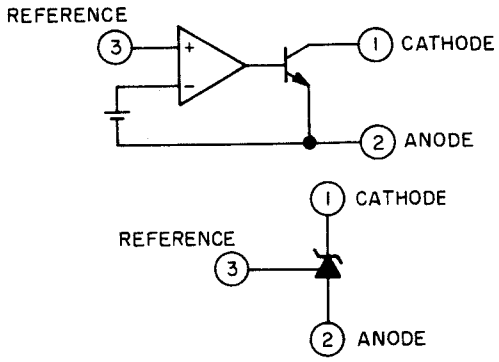
■ NJM78L09UA 【JRC】
(3-Terminal Positive Voltage Regulator (+9V))



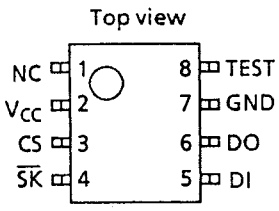


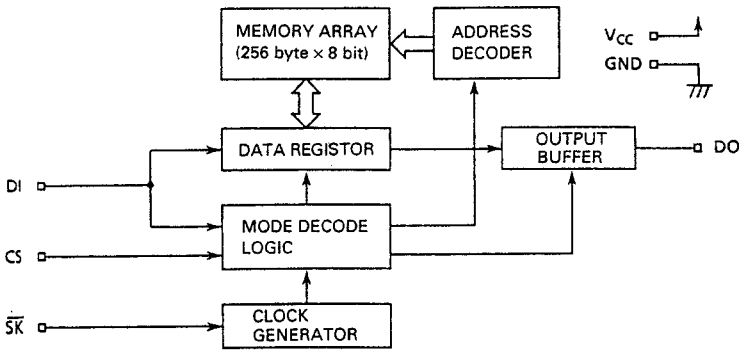
■ TA76431F 【TOSHIBA】
(Variable Voltage Shunt Regulator)



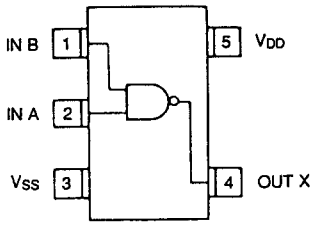


■ S-2927AIF10G 【SEIKO】
(CMOS 2K-bit Serial EE PROM)



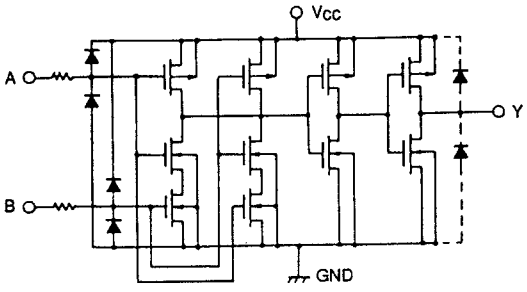


■ SC7S00F 【TOSHIBA】
(2-Input NAND Gate)

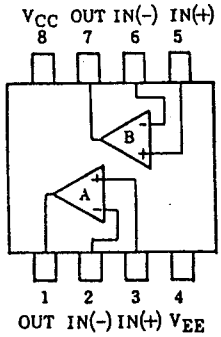


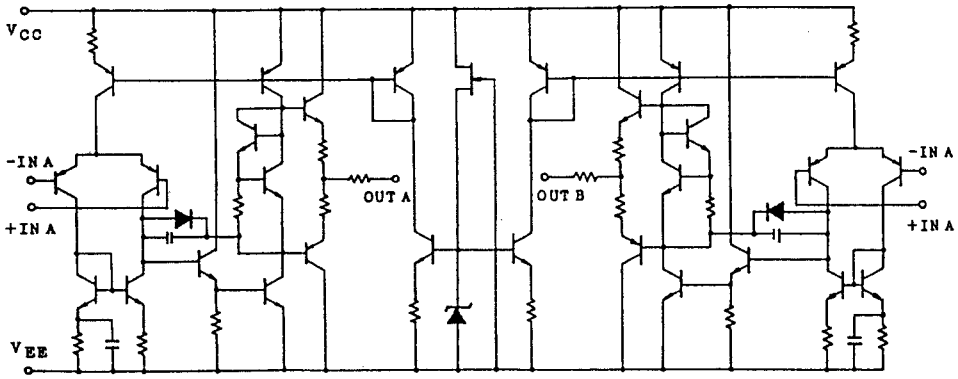
TRUE Table

A	B	X
L	L	H
L	H	H
H	L	H
H	H	L

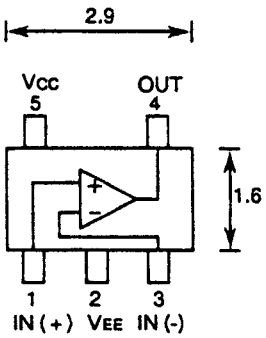


■ TA75W558FU 【TOSHIBA】
(Dual Low-Noise Op.Amp.)

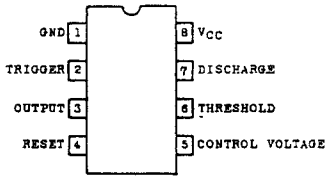


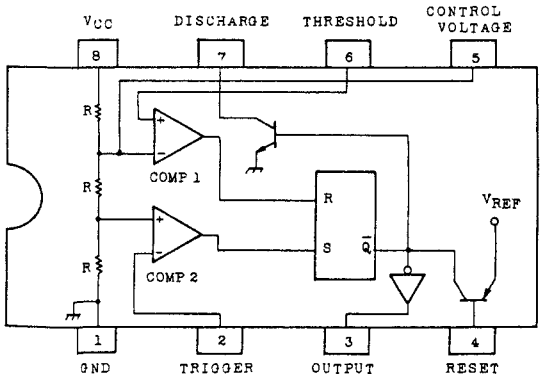


■ TA75S01F 【TOSHIBA】
(Single Op.Amp)

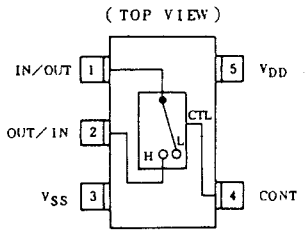


■ TA7555F 【TOSHIBA】
(Pulse Generator)

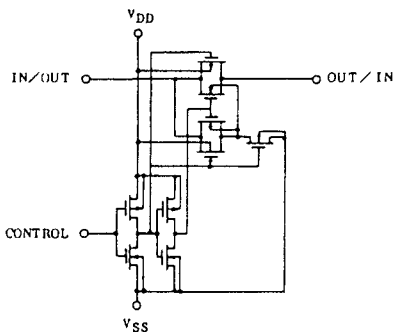




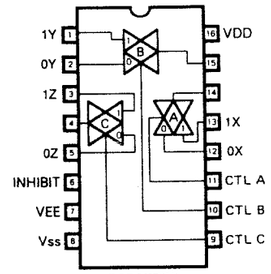
■ SC14S66F 【MOTOROLA】
(2-Input AND Gate)



CONTROL	IMPEDANCE BETWEEN IN/OUT - OUT/IN *
H	$0.5 \sim 5 \times 10^2\ \Omega$
L	$> 10^9\ \Omega$



■ TC4053BF 【TOSHIBA】
(Triple 2 Channel Analog Multiplexers/ Demultiplexers)



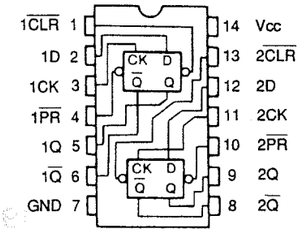
(TOP VIEW)

TRUTH TABLE

CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C	B	A	4053BP 4053BF
L	L	L	L	0X, 0Y, 0Z
L	L	L	H	1X, 0Y,0Z
L	L	H	L	0X, 1Y, 0Z
L	L	H	H	1X, 1Y, 0Z
L	H	L	L	0X, 0Y, 1Z
L	H	L	H	1X, 0Y, 1Z
L	H	H	L	0X, 1Y, 1Z
L	H	H	H	1X, 1Y, 1Z
H	*	*	*	NOTE

* Don't Care,

■ TC74HC74AF 【TOSHIBA】
(Dual D-Type Positive-EDGE-Triggered Flip-Flops With Preset AND Clear)



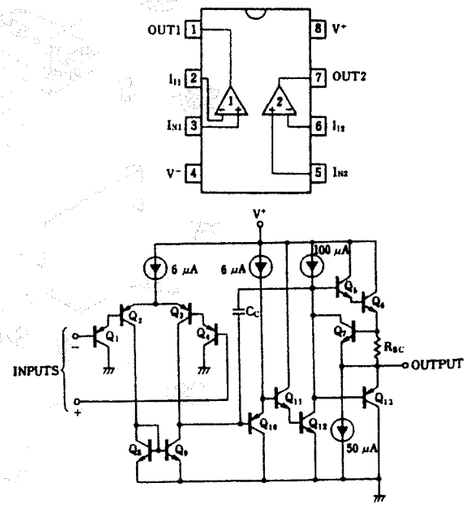
(Top View)

TRUE Table

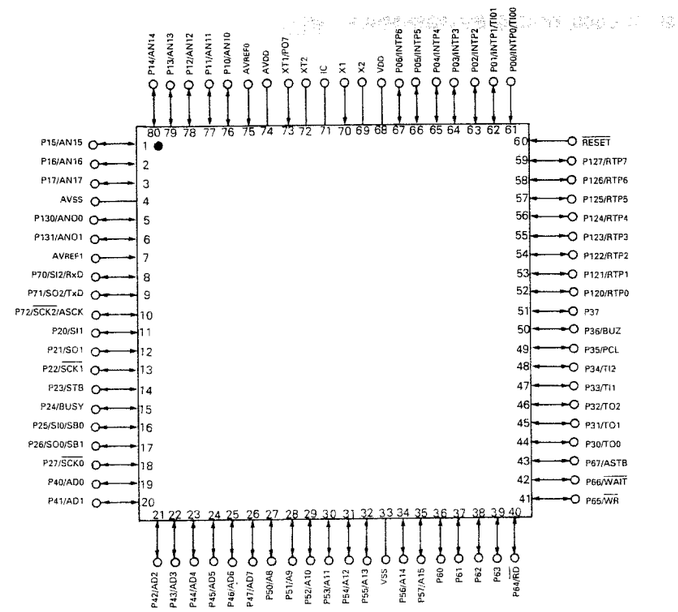
INPUTS				OUTPUTS		FUNCTION
CLR	PR	D	CK	Q	Q	
L	H	X	X	L	H	CLEAR
H	L	X	X	H	L	PRESET
L	L	X	X	H	H	—
H	H	L	↑	L	H	—
H	H	H	↑	H	L	—
H	H	X	↓	Q_n	$\overline{Q}_n$	NO CHANGE

X : Don't care

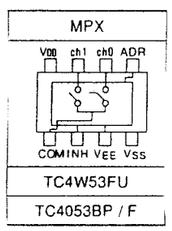
■ UPC358G 【NEC】
(Log.Amp)



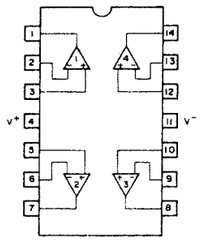
■ UPD78054GC 【NEC】
(8-bit Single chip Micro Computer)



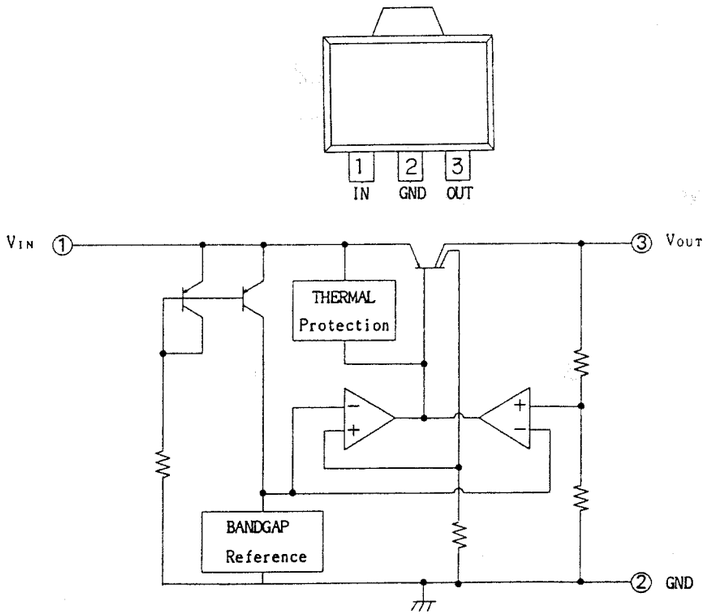
■ TC4W53F 【TOSHIBA】
(2-Channel Multiplexer)

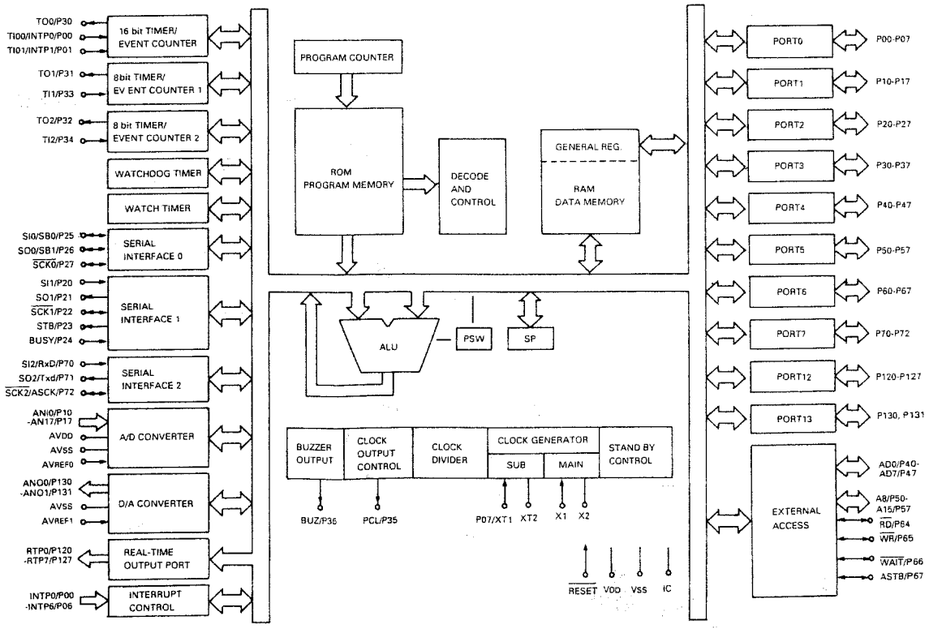


■ XRA10324AFV 【EXAR】
(Dual Op.Amp)



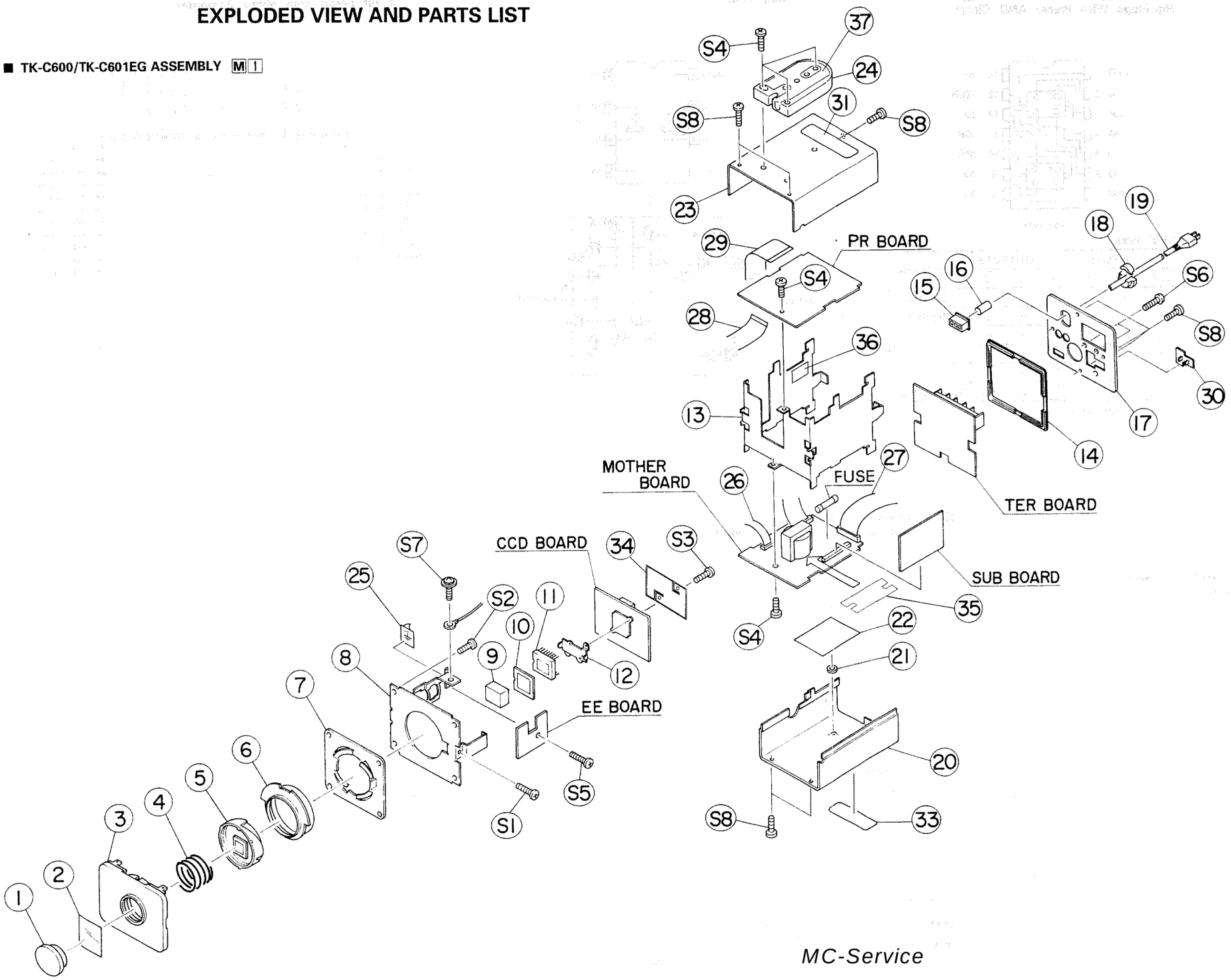
■ TK11650U 【TOKO】
(3-Terminal Positive Voltage Regulator)





SECTION 4
EXPLODED VIEW AND PARTS LIST

■ TK-C600/TK-C601EG ASSEMBLY M1



● TK-C600/TK-C601EG assembly list [M][1]

[M][1][M][M]□□□□

Symbol No.	Part No.	Part Name	Description
1	A38305	CAP	
2	SC40286-001	SHEET	
3	SC20489-001	FRONT FRAME	
4	SC45267-001	SPRING	
5	SC20578-001	SENSOR BASE	
6	SC31647-001	RING	
7	SC45335-002	LEAF SPRING	
8	SC31649-002	PLATE	TK-C601EG
8	SC31649-001	PLATE	TK-C600U/E
9	SCV2511-001	CRYSTAL L.P.F.	
10	SC45648-001	SENSOR MASK	
⚠ 11	MN3726MFE	CCD	MATSUSHITA(E)
⚠ 11	MN3716MFE	CCD	MATSUSHITA(U)
12	SC45243-001	PLATE	
13	SC31838-001	CHASSIS	
14	SC31650-001	ESCUTCHEON	
⚠ 15	SCV1731-003	HOUSING	
16	QXT3820-035	TUBE	
17	SC31842-003	REAR PANEL	TK-C601EG
17	SC31842-002	REAR PANEL	TK-C600E
17	SC31842-001	REAR PANEL	TK-C600U
⚠ 18	QHS6374-162	CORD STOPPER	
⚠ 19	SCV2317-001	POWER CORD	TK-C601EG
20	SC31840-003	BOTTOM COVER	TK-C601EG
20	SC31840-001	BOTTOM COVER	TK-C600U
20	SC31840-002	BOTTOM COVER	TK-C600E
21	SC45625-001	SPACER	TK-C601EG
22	SC41702-006	SHEET	TK-C601EG
23	SC31839-001	UPPER COVER	
24	CM21394-C0A	TRIPOD BASE	
25	SC45464-001	LABEL	TK-C601EG
⚠ 26	SCV1902-0607K	FLAT CABLE ASSY	
⚠ 27	SCV1902-1805K	FFC CABLE	
⚠ 28	SCV2531-001	FPC CABLE	
⚠ 29	SCV2337-2407BD	FFC CABLE	
30	SC45690-001	CAP	
31	—	SERIAL NAME PLATE	
33	SS48371-001	LABEL	TK-C601EG
34	SC45739-001	SHIELD PLATE	
⚠ 35	SC45746-001	SHEET	TK-C601EG
36	SC45456-001	FUSE CAUTION LABEL	TK-C600
37	CM32754-C01	TRIPOD COVER	
S1	SPSP2610N	SCREW	M2.6×10
S2	YQM30032-36	SCREW	
S3	SDSF2008M	SCREW	M2×8
S4	SPSP2605N	SCREW	M2.6×5
S5	SDSP2004N	SCREW	M2×4
S6	SDSF2606M	SCREW	M2.6×6
S7	DPSP4006Z	SCREW	M4×6
S8	SPSK2040R	SCREW	M2×4.0

SECTION 5
ELECTRICAL PARTS LIST

SAFETY PRECAUTION:
Parts identified by the ⚠ symbol are critical for safety. Replace only with specified parts numbers.
For maximum reliability and performance, all other replacement parts should be identical to those specified.

NOTE:
- Parts not denoted by parts numbers are not supplied by JVC.
- Abbreviations in this list are as follows:

RESISTORS

In the "Description" column:
All resistance values are in ohms (Ω).
K expresses kilo-ohm (1 000 ohms, kΩ).
M expresses mega-ohm (10^6 ohms, MΩ).

In the "Parts Name" column:

COMP. RESISTOR	:	Composition Resistor
U.F. RESISTOR	:	Non-inflammable Resistor
O.M.F. RESISTOR	:	Oxide Metalized Film Resistor
FUSI. RESISTOR	:	Fusible Resistor
M.P. RESISTOR	:	Metal Plate Resistor
M.G. RESISTOR	:	Metal Graze Resistor
M.F. RESISTOR	:	Metal Film Resistor
W.W. RESISTOR	:	Wire Wound Resistor

CAPACITORS

In the "Description" column:
All capacitance values are in microfarad (μF) unless otherwise indicated.
P expresses picofarad (10^{-12} farad, pF).

In the "Parts Name" column:

TRIM. CAPACITOR	:	Trimmer Capacitor
CER. CAPACITOR	:	Ceramic Capacitor
E. CAPACITOR	:	Electrolytic Capacitor
TAN. CAPACITOR	:	Tantalum Capacitor
MPP CAPACITOR	:	Metalized Polypropylene Capacitor
O.F. CAPACITOR	:	Oil Film Capacitor
MPF CAPACITOR	:	Metalized Polyfilm Capacitor
F.M. CAPACITOR	:	Film Mica Capacitor
P.P. CAPACITOR	:	Polypropylene Capacitor
P.S. CAPACITOR	:	Polystyrene Capacitor

Note: In the "Description" column of the parts list, (U) means the parts for the U version while (E) is for the E Version.

Symbol No.	Part No.	Part Name	Description	
IC1	SCV1585-064	I.C.(M)	JVC	(U) ← for U version
	SCV1585-067	I.C.(M)	JVC	(E) ← for E version

5.1 CCD BOARD ASSEMBLY LIST [0][1]

SCK2404-01-N0A

SCK2404-01-P0A [0][1][ ][ ][ ][ ][ ][ ]

Symbol No.	Part No.	Part Name	Description	
IC1	TK11650UTL	I.C.(M)	TOKO	
	SCV2100-001	IC SOCKET	for IC101 (CCD)	
IC103	MN3111H	I.C.(M)	MATSUSHITA	
IC104	AN2018S	I.C.(M)	MATSUSHITA	
Q101	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q102	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q103	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q104	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q105	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q106	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
D101	MA8100(M)	ZENNER DIODE	MATSUSHITA	
D102	1SS357	DIODE	TOSHIBA	
D103	1SS357	DIODE	TOSHIBA	
D104	1SS357	DIODE	TOSHIBA	
D105	1SS357	DIODE	TOSHIBA	
D106	1SS357	DIODE	TOSHIBA	
D107	1SS357	DIODE	TOSHIBA	
D108	MA133	DIODE	MATSUSHITA	
D109	MA133	DIODE	MATSUSHITA	
D114	1SS357	DIODE	TOSHIBA	
D118	1SS357	DIODE	TOSHIBA	
D119	MA8150(H)	ZENNER DIODE	MATSUSHITA	
D120	MA111	DIODE	MATSUSHITA	
R101	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R102	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R103	NRSA63J-333	M.G.RESISTOR	33K	1/16W
R104	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R105	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R107	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R110	NRSA63J-220	M.G.RESISTOR	22	1/16W
R111	NRSA63J-220	M.G.RESISTOR	22	1/16W
R112	NRSA63J-203	M.G.RESISTOR	20K	1/16W
R113	NRSA63J-393	M.G.RESISTOR	39K	1/16W
R114	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R115	NRSA63J-272	M.G.RESISTOR	2.7K	1/16W
R116	NRSA63J-123	M.G.RESISTOR	12K	1/16W
R117	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R118	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R119	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R120	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R121	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R122	NRSA63J-432	M.G.RESISTOR	4.3K	1/16W
R123	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R124	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R126	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
C1	NCB31HK-103	CER.CAPACITOR	0.010	50V
C2	NCB31HK-103	CER.CAPACITOR	0.010	50V
C3	NEE51AM-226	TAN.CAPACITOR	22	10V
C4	NEE51AM-476	TAN.CAPACITOR	47	10V
C101	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C102	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C103	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C104	NEE21CM-105	TAN.CAPACITOR	1.0	16V
C105	NCF31CZ-104	CER.CAPACITOR	0.10	16V

Symbol No.	Part No.	Part Name	Description	
C106	NEE51AM-226	TAN.CAPACITOR	22	10V
C110	NEE51EM-226	TAN.CAPACITOR	22	25V
C111	NEE51EM-226	TAN.CAPACITOR	22	25V
C112	NEE51VM-156	TAN.CAPACITOR	15	35V
C113	NEE51EM-226	TAN.CAPACITOR	22	25V
C114	NEE51CM-226	TAN.CAPACITOR	22	16V
C115	NEE51CM-226	TAN.CAPACITOR	22	16V
C116	NEE51EM-226	TAN.CAPACITOR	22	25V
C117	NEE51AM-226	TAN.CAPACITOR	22	10V
C118	NEE51VM-156	TAN.CAPACITOR	15	35V
C119	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C120	NCB21EK-104	CER.CAPACITOR	0.10	25V
C121	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C122	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C123	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C124	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C125	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C126	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C127	NEE51VM-156	TAN.CAPACITOR	15	35V
C128	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C129	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C130	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C131	NEE51VM-106	TAN.CAPACITOR	10	35V
C132	NEE51AM-476	TAN.CAPACITOR	47	10V
C133	NEE51VM-106	TAN.CAPACITOR	10	35V
C134	NEE51VM-106	TAN.CAPACITOR	10	35V
L1	CELP008-220	COIL	22μH	
L4	CELP008-220	COIL	22μH	
CN101	SSV1983-020W	CONNECTOR	20-PIN	

5.2 PROCESS BOARD ASSEMBLY LIST [0][2]

SCK2404-02-N0A

SCK2404-02-P0A [0][2][ ][ ][ ][ ][ ][ ]

Symbol No.	Part No.	Part Name	Description	
IC3	TK11650UTL	I.C.(M)	TOKO	
IC10	TK11650UTL	I.C.(M)	TOKO	
IC102	MN5216	I.C.(M)	MATSUSHITA	
IC110	SC7S00F	I.C.(M)	MOTOROLA	
IC111	SC7S00F	I.C.(M)	MOTOROLA	
IC201	AN2145NFHP	I.C.(M)	MATSUSHITA	
IC202	MN3860SA	I.C.(M)	MATSUSHITA	(U)
	MN3861SA	I.C.(M)	MATSUSHITA	(E)
IC203	MB88345PF	I.C.(M)	FUJITSU	
IC204	AN2458SH	I.C.(M)	MATSUSHITA	
IC205	XRA10324AFV	I.C.(M)	EXAR	
IC206	TA75W558F	I.C.(M)	TOSHIBA	
IC207	UPD78054GC	I.C.(M)	NEC	
IC208	S-2927AIF10G	I.C.(M)	SEIKO	
IC209	TA75W558F	I.C.(M)	TOSHIBA	
IC210	TC4053BF	I.C.(M)	TOSHIBA	
IC211	EHDGA1533	S.C MODULE	MATSUSHITA	(U)
	EHDGA1534	S.C MODULE	MATSUSHITA	(E)
IC212	TA75S01F	I.C.(M)	TOSHIBA	
IC213	MN12821	I.C.(M)	MATSUSHITA	
IC214	UPC358G	I.C.(M)	NEC	
IC215	NJM2903V	I.C.(M)	JRC	
IC216	SC14S66F	I.C.(M)	TOSHIBA	
IC217	SC14S66F	I.C.(M)	TOSHIBA	
IC218	TA75W558F	I.C.(M)	TOSHIBA	
IC219	TC4W53F	I.C.(M)	TOSHIBA	
IC220	TC4W53F	I.C.(M)	TOSHIBA	
IC221	TC4053BF	I.C.(M)	TOSHIBA	
IC222	TC4W53F	I.C.(M)	TOSHIBA	
IC223	NJM2509V	I.C.(M)	JRC	
IC224	MM1031XMR	I.C.(M)	MITSUMI	
Q111	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q201	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q202	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q203	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q204	2SA1790(BC)	TRANSISTOR	MATSUSHITA	
Q205	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q206	2SC4626(BC)	TRANSISTOR	MATSUSHITA	
Q209	XP1B301	TRANSISTOR	MATSUSHITA	
D111	HVU306A	VARI-CAPA DIODE	HITACHI	
D112	HVU306A	VARI-CAPA DIODE	HITACHI	
D201	MA111	DIODE	MATSUSHITA	
R127	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R128	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R129	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R130	NRSA63J-101	M.G.RESISTOR	100	1/16W
R131	NRSA63J-560	M.G.RESISTOR	56	1/16W
R132	NRSA63J-560	M.G.RESISTOR	56	1/16W
R136	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R140	NRSA63J-0R0	M.G.RESISTOR	0	1/16W(E)
R141	NRSA63J-0R0	M.G.RESISTOR	0	1/16W(U)
R143	NRSA63J-220	M.G.RESISTOR	22	1/16W
R144	NRSA63J-183	M.G.RESISTOR	18K	1/16W
R145	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R148	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R149	NRSA63J-123	M.G.RESISTOR	12K	1/16W

Symbol No.	Part No.	Part Name	Description	
R152	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R153	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R154	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R155	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R156	NRSA63J-223	M.G.RESISTOR	22K	1/16W
R157	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R159	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R162	NRSA63J-473	M.G.RESISTOR	47K	1/16W
R163	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R164	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R171	NRSA63J-823	M.G.RESISTOR	82K	1/16W
R172	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R175	NRSA63J-473	M.G.RESISTOR	47K	1/16W(E)
R176	NRSA63J-473	M.G.RESISTOR	47K	1/16W(U)
R199	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R201	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R202	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R203	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R204	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R205	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R206	NRSA63J-155	M.G.RESISTOR	1.5M	1/16W
R207	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R208	NRSA63J-275	M.G.RESISTOR	2.7M	1/16W
R209	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R210	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R211	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R212	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R213	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R214	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R215	NRSA63J-152	M.G.RESISTOR	1.5K	1/16W
R217	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R218	NRSA63J-152	M.G.RESISTOR	1.5K	1/16W
R220	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R221	NRSA63J-123	M.G.RESISTOR	12K	1/16W
R222	NRSA63J-223	M.G.RESISTOR	22K	1/16W
R223	NRSA63J-223	M.G.RESISTOR	22K	1/16W
R224	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R225	NRSA63J-333	M.G.RESISTOR	33K	1/16W
R226	NRSA63J-273	M.G.RESISTOR	27K	1/16W
R227	NRSA63J-183	M.G.RESISTOR	18K	1/16W
R228	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R229	NRSA63J-122	M.G.RESISTOR	1.2K	1/16W
R230	NRSA63J-182	M.G.RESISTOR	1.8K	1/16W
R233	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R234	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R235	NRSA63J-203	M.G.RESISTOR	20K	1/16W
R236	NRSA63J-113	M.G.RESISTOR	11K	1/16W
R237	NRSA63J-183	M.G.RESISTOR	18K	1/16W
R238	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R239	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R240	NRSA63J-183	M.G.RESISTOR	18K	1/16W
R241	NRSA63J-561	M.G.RESISTOR	560	1/16W
R242	NRSA63J-242	M.G.RESISTOR	2.4K	1/16W
R243	NRSA63J-561	M.G.RESISTOR	560	1/16W
R244	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R245	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R246	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R247	NRSA63J-474	M.G.RESISTOR	470K	1/16W
R248	NRSA63J-103	M.G.RESISTOR	10K	1/16W

MC-Service

Symbol No.	Part No.	Part Name	Description	
R249	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R250	NRSA63J-822	M.G.RESISTOR	8.2K	1/16W
R251	NRSA63J-152	M.G.RESISTOR	1.5K	1/16W
R252	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R253	NRSA63J-683	M.G.RESISTOR	68K	1/16W
R254	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R255	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R256	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R257	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R258	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R259	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R260	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R261	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R262	NRSA63J-683	M.G.RESISTOR	68K	1/16W
R264	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R265	NRSA63J-512	M.G.RESISTOR	5.1K	1/16W
R266	NRSA63J-683	M.G.RESISTOR	68K	1/16W
R267	NRSA63J-393	M.G.RESISTOR	39K	1/16W
R268	NRSA63J-393	M.G.RESISTOR	39K	1/16W
R269	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R270	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R271	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R272	NRSA63J-823	M.G.RESISTOR	82K	1/16W
R273	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R274	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R275	NRSA63J-823	M.G.RESISTOR	82K	1/16W
R276	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R277	NRSA63J-332	M.G.RESISTOR	3.3K	1/16W
R278	NRSA63J-562	M.G.RESISTOR	5.6K	1/16W
R279	NRSA63J-562	M.G.RESISTOR	5.6K	1/16W
R282	NRSA63J-823	M.G.RESISTOR	82K	1/16W
R283	NRSA63J-124	M.G.RESISTOR	120K	1/16W
R284	NRSA63J-203	M.G.RESISTOR	20K	1/16W
R285	NRSA63J-0R0	M.G.RESISTOR	0	1/16W (U)
	NRSA63J-203	M.G.RESISTOR	20K	1/16W (E)
R286	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R295	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R302	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R303	NRSA63J-122	M.G.RESISTOR	1.2K	1/16W
R304	NRSA63J-682	M.G.RESISTOR	6.8K	1/16W
R305	NRSA63J-122	M.G.RESISTOR	1.2K	1/16W
R314	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R320	NRSA63J-473	M.G.RESISTOR	47K	1/16W
R321	NRSA63J-101	M.G.RESISTOR	100	1/16W
R322	NRSA63J-105	M.G.RESISTOR	1.0M	1/16W
R323	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R329	NRSA63J-152	M.G.RESISTOR	1.5K	1/16W
R330	NRSA63J-223	M.G.RESISTOR	22K	1/16W
R331	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R332	NRSA63J-154	M.G.RESISTOR	150K	1/16W
R333	NRSA63J-334	M.G.RESISTOR	330K	1/16W
R334	NRSA63J-184	M.G.RESISTOR	180K	1/16W
R335	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R336	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R337	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R338	NRSA63J-392	M.G.RESISTOR	3.9K	1/16W
R339	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R340	NRSA63J-684	M.G.RESISTOR	680K	1/16W
R341	NRSA63J-103	M.G.RESISTOR	10K	1/16W

Symbol No.	Part No.	Part Name	Description	
R342	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R343	NRSA63J-684	M.G.RESISTOR	680K	1/16W
R344	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R345	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R349	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R350	NRSA63J-273	M.G.RESISTOR	27K	1/16W
R351	NRSA63J-273	M.G.RESISTOR	27K	1/16W
R352	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R354	NRSA63J-473	M.G.RESISTOR	47K	1/16W
R355	NRSA63J-224	M.G.RESISTOR	220K	1/16W
R356	NRSA63J-183	M.G.RESISTOR	18K	1/16W
R357	NRSA63J-273	M.G.RESISTOR	27K	1/16W
R360	NRSA63J-561	M.G.RESISTOR	560	1/16W
R361	NRSA63J-561	M.G.RESISTOR	560	1/16W
R362	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R363	NRSA63J-102	M.G.RESISTOR	1.0K	1/16W
R366	NRSA63J-750	M.G.RESISTOR	75	1/16W
R368	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R369	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R372	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R373	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R374	NRSA63J-471	M.G.RESISTOR	470	1/16W
R375	NRSA63J-471	M.G.RESISTOR	470	1/16W
R376	NRSA63J-393	M.G.RESISTOR	39K	1/16W
R377	NRSA63J-103	M.G.RESISTOR	10K	1/16W
R400	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
R401	NRSA63J-331	M.G.RESISTOR	330	1/16W
R402	NRSA63J-331	M.G.RESISTOR	330	1/16W
R403	NRSA63J-331	M.G.RESISTOR	330	1/16W
R404	NRSA63J-331	M.G.RESISTOR	330	1/16W
R405	NRSA63J-331	M.G.RESISTOR	330	1/16W
RA150	NRB024J-473	RESISTOR ARRAY		
RA151	NRB024J-473	RESISTOR ARRAY		
RA250	NRB044J-103	RESISTOR ARRAY		
RA251	NRB044J-103	RESISTOR ARRAY		
RA252	NRB024J-682	RESISTOR ARRAY		
RA253	NRB024J-103	RESISTOR ARRAY		
RA254	NRB024J-393	RESISTOR ARRAY		
RA255	NRB044J-103	RESISTOR ARRAY		
RA256	NRB024J-103	RESISTOR ARRAY		
RA257	NRB024J-103	RESISTOR ARRAY		
RA258	NRB024J-103	RESISTOR ARRAY		
RA259	NRB024J-103	RESISTOR ARRAY		
RA260	NRB024J-103	RESISTOR ARRAY		
RA261	NRB024J-472	RESISTOR ARRAY		
RA262	NRB024J-103	RESISTOR ARRAY		
RA263	NRB024J-103	RESISTOR ARRAY		
RA280	NRB044J-102	RESISTOR ARRAY		
RA301	NRB044J-473	RESISTOR ARRAY		
RA302	NRB044J-102	RESISTOR ARRAY		
RA303	NRB024J-472	RESISTOR ARRAY		
RA304	NRB044J-473	RESISTOR ARRAY		
RA305	NRB044J-473	RESISTOR ARRAY		
RA306	NRB024J-472	RESISTOR ARRAY		
RA307	NRB024J-473	RESISTOR ARRAY		
C6	NEA11AM-336	E.CAPACITOR	33	10V

Symbol No.	Part No.	Part Name	Description	
C7	NCB31HK-103	CER.CAPACITOR	0.010	50V
C8	NCB31HK-103	CER.CAPACITOR	0.010	50V
C9	NEA10JM-226	E.CAPACITOR	22	6.3V
C20	NEA10JM-226	E.CAPACITOR	22	6.3V
C21	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C22	NEA11AM-336	E.CAPACITOR	33	10V
C23	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C140	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C141	NCB31HK-102	CER.CAPACITOR	1000P	50V
C142	NCB31HK-102	CER.CAPACITOR	1000P	50V
C144	NCT06CH-560	CER.CAPACITOR	56P	50V
C145	NCB31HK-102	CER.CAPACITOR	1000P	50V
C148	NCB31HK-103	CER.CAPACITOR	0.010	50V
C149	NEA10JM-226	E.CAPACITOR	22	6.3V
C150	NCT06CH-270	CER.CAPACITOR	27P	50V (U)
	NCT06CH-220	CER.CAPACITOR	22P	50V (E)
C151	NCB31HK-102	CER.CAPACITOR	1000P	50V
C152	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C156	NCT06CH-101	CER.CAPACITOR	100P	50V
C157	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C158	NEA10JM-226	E.CAPACITOR	22	6.3V
C159	NCT06CH-560	CER.CAPACITOR	56P	50V
C160	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C201	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C202	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C203	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C204	NCT06CH-121	CER.CAPACITOR	120P	50V
C205	NCT06CH-560	CER.CAPACITOR	56P	50V (U)
	NCT06CH-390	CER.CAPACITOR	39P	50V (E)
C206	NCB31HK-103	CER.CAPACITOR	0.010	50V
C207	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C208	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C209	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C210	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C211	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C212	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C213	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C214	NCF31HZ-473	CER.CAPACITOR	0.047	50V
C215	NCF31HZ-473	CER.CAPACITOR	0.047	50V
C216	NCF31HZ-473	CER.CAPACITOR	0.047	50V
C217	NEE51AM-106	TAN.CAPACITOR	10	10V
C219	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C221	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C222	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C223	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C224	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C225	NCT06CH-100	CER.CAPACITOR	10P	50V
C226	NCT06CH-330	CER.CAPACITOR	33P	50V
C227	NCT06CH-270	CER.CAPACITOR	27P	50V
C228	NEA11CM-106	E.CAPACITOR	10	16V
C229	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C230	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C231	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C232	NCB31HK-103	CER.CAPACITOR	0.010	50V
C233	NEE51AM-335	TAN.CAPACITOR	3.3	10V
C234	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C235	NEE21CM-105	TAN.CAPACITOR	1.0	16V
C236	NEE21CM-105	TAN.CAPACITOR	1.0	16V
C237	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C238	NCB31HK-103	CER.CAPACITOR	0.010	50V

Symbol No.	Part No.	Part Name	Description	
C239	NCT06CH-180	CER.CAPACITOR	18P	50V
C240	NCF31HZ-473	CER.CAPACITOR	0.047	50V
C241	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C242	NCB31HK-103	CER.CAPACITOR	0.010	50V
C243	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C244	NEE51AM-106	TAN.CAPACITOR	10	10V
C245	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C246	NEE51AM-335	TAN.CAPACITOR	3.3	10V
C247	NEE51AM-335	TAN.CAPACITOR	3.3	10V
C248	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C249	NCB31HK-103	CER.CAPACITOR	0.010	50V
C251	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C252	NCT06CH-100	CER.CAPACITOR	10P	50V
C253	NCT06CH-100	CER.CAPACITOR	10P	50V
C254	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C255	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C256	NEE51AM-106	TAN.CAPACITOR	10	10V
C257	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C258	NCB31HK-103	CER.CAPACITOR	0.010	50V
C259	NCB31HK-103	CER.CAPACITOR	0.010	50V
C260	NCB31HK-103	CER.CAPACITOR	0.010	50V
C261	NCB31HK-103	CER.CAPACITOR	0.010	50V
C262	NCB31HK-103	CER.CAPACITOR	0.010	50V
C264	NCB31HK-103	CER.CAPACITOR	0.010	50V
C265	NCB31HK-103	CER.CAPACITOR	0.010	50V
C266	NCT06CH-220	CER.CAPACITOR	22P	50V
C267	NCT06CH-220	CER.CAPACITOR	22P	50V
C268	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C269	NEA11CM-106	E.CAPACITOR	10	16V
C270	NCB31HK-103	CER.CAPACITOR	0.010	50V
C272	NEA10JM-226	E.CAPACITOR	22	6.3V
C280	NCT06CH-330	CER.CAPACITOR	33P	50V
C281	NEE51AM-335	TAN.CAPACITOR	3.3	10V
C282	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C283	NEA11CM-106	E.CAPACITOR	10	16V
C284	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C285	NEA11CM-106	E.CAPACITOR	10	16V
C288	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C289	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C290	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C292	NEE51AM-106	TAN.CAPACITOR	10	10V
C293	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C294	NCF21CZ-105	CER.CAPACITOR	1.0	16V
C295	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C296	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C297	NCB31HK-103	CER.CAPACITOR	0.010	50V
C300	NEE21CM-105	TAN.CAPACITOR	1.0	16V
C301	NCB31HK-103	CER.CAPACITOR	0.010	50V
C302	NCB31HK-103	CER.CAPACITOR	0.010	50V
C303	NCB31HK-103	CER.CAPACITOR	0.010	50V
C304	NCB31HK-103	CER.CAPACITOR	0.010	50V
C305	NCB31HK-103	CER.CAPACITOR	0.010	50V
C306	NEE21CM-105	TAN.CAPACITOR	1.0	16V
C307	NEE21CM-105	TAN.CAPACITOR	1.0	16V
C400	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C401	NCF31CZ-104	CER.CAPACITOR	0.10	16V
C402	NCF31CZ-104	CER.CAPACITOR	0.10	16V

5.3 MOTHER BOARD ASSEMBLY LIST [0][3]

SCK2408-01-N0A (TK-C600U)

SCK2408-01-P0A (TK-C600E) [0][3]□□□□□□

Symbol No.	Part No.	Part Name	Description
L2	CE40344-101	CHIP INDUCTOR	100μH
L10	CELP008-220	COIL	22μH
L11	CELP008-220	COIL	22μH
L12	CELP008-220	COIL	22μH
L13	CELP008-220	COIL	22μH
L14	CELP008-220	COIL	22μH
L15	CELP008-220	COIL	22μH
L101	CELP040-5R6	CHIP P COIL	5.6μH
L201	SCV1950-330	PEAKING COIL	33μH
LC201	PELN0842-Z	CHIP L.P.F	3.58MHz
LC202	PELN0843-Z	DELAY LINE	
X101	2FS-19.069928FB	CRYSTAL	19.069928MHz (U)
	2FS-19.3125FB	CRYSTAL	19.3125MHz (E)
X201	PEVB0572	CRYSTAL	5MHz
CN201	SSV1983-020W	CONNECTOR	20-PIN
CN202	SCV2477-024	CONNECTOR	24-PIN
TP201	SCV1880-001	TEST POINT	
TP202	SCV1880-001	TEST POINT	

Symbol No.	Part No.	Part Name	Description	
Q101	2SC2655(Y)	TRANSISTOR	TOSHIBA	
Q102	2SC2655(Y)	TRANSISTOR	TOSHIBA	
Q103	2SC3311A(RS)	TRANSISTOR	MATSUSHITA	
D101	ERA15-02	DIODE	KYODO DENKI	
D102	ERA15-02	DIODE	KYODO DENKI	
D103	ERA15-02	DIODE	KYODO DENKI	
D104	ERA15-02	DIODE	KYODO DENKI	
D105	ERA82-004	DIODE	FUJIELECTRIC	
D106	ERA82-004	DIODE	FUJIELECTRIC	
D107	ERA82-004	DIODE	FUJIELECTRIC	
D108	ERA82-004	DIODE	FUJIELECTRIC	
D109	5GWJ2C48C	DIODE	TOSHIBA	
R101	QRD161J-472	CARBON RESISTOR	4.7K	1/6W
R102	QRD161J-103	CARBON RESISTOR	10K	1/6W
R104	QRD161J-564	CARBON RESISTOR	560K	1/6W
R105	QRD161J-564	CARBON RESISTOR	560K	1/6W
R106	QRD161J-104	CARBON RESISTOR	100K	1/6W
R107	QRD161J-0R0	CARBON RESISTOR	0	1/6W
R108	QRD161J-222	CARBON RESISTOR	2.2K	1/6W
C101	QFN41HJ-103	MYLAR CAPACITOR	0.010	50V
C102	QFN41HJ-103	MYLAR CAPACITOR	0.010	50V
C103	QEHC1HM-477	E.CAPACITOR	470	63V
C104	QEHC1AM-108	E.CAPACITOR	1000	10V
C105	QEX41CM-156	E.CAPACITOR	15	16V
C106	QETA1AM-107	E.CAPACITOR	100	10V
C107	QEX41AM-106	E.CAPACITOR	10	10V
C108	QETA1AM-107	E.CAPACITOR	100	10V
C109	QETA1AM-107	E.CAPACITOR	100	10V
C110	QETA0JM-477	E.CAPACITOR	470	6.3V
C111	QER41CM-226	E.CAPACITOR	22	16V
C112	QFN41HJ-103	MYLAR CAPACITOR	0.010	50V
C113	QFN41HJ-103	MYLAR CAPACITOR	0.010	50V
C114	QCZ0206-104	CER.CAPACITOR	0.10	
C115	QCZ0206-104	CER.CAPACITOR	0.10	
C116	QFLC1HJ-473	MYLAR CAPACITOR	0.047	50V
C117	QER41CM-476	E.CAPACITOR	47	16V
C119	QFV41HJ-105	MYLAR CAPACITOR	1.0	50V
L101	PGZ00828-391	COIL	390μH	
L102	SSV1606-001	PEAKING COIL	64μH	
CN101	SCV2446-024	FFC CONNECTOR	24-PIN	
CN102	SCV2446-018	CONNECTOR	18-PIN	
CN103	SCV2446-006	CONNECTOR	6-PIN	
CN105	SCV2598-001	IC SOCKET	16-PIN	
⚠FC1	SCV1271-003	FUSE CLIP		
⚠FC2	SCV1271-003	FUSE CLIP		
⚠T101	SCV2540-001	SWITCH TRANS		

5.4 MOTHER BOARD ASSEMBLY LIST [0][4]

SCK2405-01-P0A (TK-C601EG) [0][4]□□□□□□□

Symbol No.	Part No.	Part Name	Description	
D101	ERA15-02	DIODE	KYODO DENKI	
D102	ERA15-02	DIODE	KYODO DENKI	
D103	ERA15-02	DIODE	KYODO DENKI	
D104	ERA15-02	DIODE	KYODO DENKI	
R101	QRD161J-0R0	CARBON RESISTOR	0	1/6W
R102	QRD161J-0R0	CARBON RESISTOR	0	1/6W
R103	QRD161J-103	CARBON RESISTOR	10K	1/6W
R104	QRD161J-273	CARBON RESISTOR	27K	1/6W
R108	QRD161J-222	CARBON RESISTOR	2.2K	1/6W
C101	QCZ0206-104	CER.CAPACITOR	0.10	
C102	QCZ0206-104	CER.CAPACITOR	0.10	
C103	QEHA1VM-108	E.CAPACITOR	1000	35V
C104	QETA0JM-477	E.CAPACITOR	470	6.3V
C105	QEHC1CM-226	E.CAPACITOR	22	16V
C106	QEHC1AM-227	E.CAPACITOR	220	10V
C107	QEHC1AM-107	E.CAPACITOR	100	10V
C108	QETA0JM-108	E.CAPACITOR	1000	6.3V
C109	QFV41HJ-105	MYLAR CAPACITOR	1.0	50V
L101	SCV2244-821	COIL	820μH	
L102	SSV1606-001	PEAKING COIL	64μH	
L103	PGZ00828-391	COIL	390μH	
CN101	SCV2446-024	FFC CONNECTOR	24-PIN	
CN102	SCV2446-018	CONNECTOR	18-PIN	
CN103	SCV2446-006	CONNECTOR	6-PIN	
CN104	SCV1752-002	CONNECTOR	2-PIN	
CN105	SCV2598-001	IC SOCKET	16-PIN	
⚠T101	SCV2537-001	POWER TRANS		

5.5 SUB BOARD ASSEMBLY PARTS LIST [0][5]

SCK2409-02-00A (TK-C600) [0][5]□□□□□□□

Symbol No.	Part No.	Part Name	Description	
IC201	FA7611M	I.C.(M)	FUJI ELECTRIC	
IC202	TC74HC74AF	I.C.(M)	TOSHIBA	
IC203	MC74HC02AF	I.C.(M)	MOTOROLA	
IC204	MC14046BF	I.C.(M)	MOTOROLA	
IC205	TA7555F	I.C.(M)	TOSHIBA	
IC206	UPC358G	I.C.(M)	NEC	
IC209	TK11650U	I.C.(M)	TOKO	
Q201	2SC2881(Y)	TRANSISTOR	TOSHIBA	
Q202	2SA1736	TRANSISTOR	TOSHIBA	
Q203	2SB1218A(RS)	TRANSISTOR	MATSUSHITA	
Q204	2SC2881(Y)	TRANSISTOR	TOSHIBA	
Q205	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q206	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q207	2SB1218A(RS)	TRANSISTOR	MATSUSHITA	
Q208	2SB1218A(RS)	TRANSISTOR	MATSUSHITA	
Q209	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q210	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q211	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
D201	HZM5.6NB1	ZENNER DIODE	HITACHI	
D202	U1GWJ49	DIODE	TOSHIBA	
D203	MA152WA	DIODE	MATSUSHITA	
D204	HZM5.6NB1	ZENNER DIODE	HITACHI	
D205	MA152WA	DIODE	MATSUSHITA	
D207	MA151K	DIODE	MATSUSHITA	
R201	NRSA02J-333	M.G.RESISTOR	33K	1/10W
R202	NRSA02J-333	M.G.RESISTOR	33K	1/10W
R203	NRSA02J-182	M.G.RESISTOR	1.8K	1/10W
R204	NRSA02J-103	M.G.RESISTOR	10K	1/10W
R205	NRSA02J-103	M.G.RESISTOR	10K	1/10W
R206	NRSA02J-123	M.G.RESISTOR	12K	1/10W
R207	NRSA02J-562	M.G.RESISTOR	5.6K	1/10W
R208	NRSA02J-393	M.G.RESISTOR	39K	1/10W
R209	NRSA02J-394	M.G.RESISTOR	390K	1/10W
R210	NRSA02J-184	M.G.RESISTOR	180K	1/10W
R211	NRSA02J-224	M.G.RESISTOR	220K	1/10W
R212	NRSA02J-682	M.G.RESISTOR	6.8K	1/10W
R213	NRSA02J-471	M.G.RESISTOR	470	1/10W
R214	NRSA02J-332	M.G.RESISTOR	3.3K	1/10W
R215	NRSA02J-562	M.G.RESISTOR	5.6K	1/10W
R216	NRSA02J-153	M.G.RESISTOR	15K	1/10W
R217	NRSA02J-472	M.G.RESISTOR	4.7K	1/10W
R218	NRSA02J-472	M.G.RESISTOR	4.7K	1/10W
R219	NRSA02J-471	M.G.RESISTOR	470	1/10W
R220	NRSA02J-471	M.G.RESISTOR	470	1/10W
R221	NRSA02J-331	M.G.RESISTOR	330	1/10W
R222	NRSA02J-681	M.G.RESISTOR	680	1/10W
R223	NRSA02J-681	M.G.RESISTOR	680	1/10W
R224	NRSA02J-0R0	M.G.RESISTOR	0	1/10W
R225	NRSA02J-222	M.G.RESISTOR	2.2K	1/10W
R226	NRSA02J-472	M.G.RESISTOR	4.7K	1/10W
R227	NRSA02J-103	M.G.RESISTOR	10K	1/10W
R228	NRSA02J-822	M.G.RESISTOR	8.2K	1/10W
R229	NRSA02J-181	M.G.RESISTOR	180	1/10W
R230	NRSA02J-152	M.G.RESISTOR	1.5K	1/10W

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5.6 SUB BOARD ASSEMBLY PARTS LIST [0][6]

SCK2406-02-00A (TK-C601EG) [0][6]□□□□□□

Symbol No.	Part No.	Part Name	Description	
R231	NRSA02J-221	M.G.RESISTOR	220	1/10W
R232	NRSA02J-221	M.G.RESISTOR	220	1/10W
R234	NRSA02J-472	M.G.RESISTOR	4.7K	1/10W
R235	NRSA02J-472	M.G.RESISTOR	4.7K	1/10W
R236	NRSA02J-103	M.G.RESISTOR	10K	1/10W
R237	NRSA02J-562	M.G.RESISTOR	5.6K	1/10W
R238	NRSA02J-562	M.G.RESISTOR	5.6K	1/10W
R239	NRSA02J-103	M.G.RESISTOR	10K	1/10W
R240	NRSA02J-103	M.G.RESISTOR	10K	1/10W
R241	NRSA02J-333	M.G.RESISTOR	33K	1/10W
R242	NRSA02J-225	M.G.RESISTOR	2.2M	1/10W
R243	NRSA02J-223	M.G.RESISTOR	22K	1/10W
R244	NRSA02J-123	M.G.RESISTOR	12K	1/10W
R245	NRSA02J-333	M.G.RESISTOR	33K	1/10W
R246	NRSA02J-562	M.G.RESISTOR	5.6K	1/10W
R247	NRSA02J-223	M.G.RESISTOR	22K	1/10W
R248	NRSA63J-223	M.G.RESISTOR	22K	1/16W
R249	NRSA63J-223	M.G.RESISTOR	22K	1/16W
R250	NRSA63J-0R0	M.G.RESISTOR	0	1/16W
C201	NEA11HM-106	E.CAPACITOR	10	50V
C202	NCB21HK-473	CER.CAPACITOR	0.047	50V
C203	NCB21HK-223	CER.CAPACITOR	0.022	50V
C204	NCT03CH-271	CER.CAPACITOR	270P	50V
C205	NCT03CH-821	CER.CAPACITOR	820P	50V
C206	NEF10JM-226	TAN.CAPACITOR	22	6.3V
C207	NCB21HK-472	CER.CAPACITOR	4700P	50V
C209	NCB21HK-222	CER.CAPACITOR	2200P	50V
C210	NCB21HK-473	CER.CAPACITOR	0.047	50V
C211	NCB21HK-102	CER.CAPACITOR	1000P	50V
C212	NCT03CH-390	CER.CAPACITOR	39P	50V
C213	NCT03CH-220	CER.CAPACITOR	22P	50V
C214	NCT03CH-390	CER.CAPACITOR	39P	50V
C215	NCB21HK-473	CER.CAPACITOR	0.047	50V
C216	NEA11EM-106	E.CAPACITOR	10	25V
C217	NEA11EM-106	E.CAPACITOR	10	25V
C218	NEA11AM-336	E.CAPACITOR	33	10V
C222	NCB21EK-393	CER.CAPACITOR	0.039	25V
C223	NCB21HK-103	CER.CAPACITOR	0.010	50V
C225	NCB21EK-393	CER.CAPACITOR	0.039	25V
C226	NCB21EK-104	CER.CAPACITOR	0.10	25V
C227	NEN11EM-475	E.CAPACITOR	4.7	25V
C228	NEN10JM-106	E.CAPACITOR	10	6.3V
C234	NEA11EM-106	E.CAPACITOR	10	25V

Symbol No.	Part No.	Part Name	Description	
IC201	FA7611M	I.C.(M)	FUJI ELECTRIC	
IC202	NJM78L09UA	I.C.(M)	JRC	
IC203	TA76431F	I.C.(M)	TOSHIBA	
IC204	TK11650U	I.C.(M)	TOKO	
IC205	MC14046BF	I.C.(M)	MOTOROLA	
IC206	TA7555F	I.C.(M)	TOSHIBA	
IC207	UPC358G	I.C.(M)	NEC	
Q201	2SB1218A(RS)	TRANSISTOR	MATSUSHITA	
Q202	2SA1736	TRANSISTOR	TOSHIBA	
Q203	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q204	2SB1218A(RS)	TRANSISTOR	MATSUSHITA	
Q205	2SA1736	TRANSISTOR	TOSHIBA	
Q206	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q207	2SC4541	TRANSISTOR	TOSHIBA	
Q208	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q209	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
Q210	2SD1819A(RS)	TRANSISTOR	MATSUSHITA	
D201	U1GWJ2C49	DIODE	TOSHIBA	
D202	U1GWJ2C49	DIODE	TOSHIBA	
D203	MA151K	DIODE	MATSUSHITA	
D204	HZM12NB2	ZENNER DIODE	HITACHI	
D205	MA147	DIODE	MATSUSHITA	
R201	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R202	NRSA63J-224	M.G.RESISTOR	220K	1/16W
R203	NRSA63J-562	M.G.RESISTOR	5.6K	1/16W
R204	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R205	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R206	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R207	NRSA02J-151	M.G.RESISTOR	150	1/10W
R208	NRSA02J-561	M.G.RESISTOR	560	1/10W
R209	NRSA63J-562	M.G.RESISTOR	5.6K	1/16W
R210	NRSA02J-391	M.G.RESISTOR	390	1/10W
R211	NRSA63J-182	M.G.RESISTOR	1.8K	1/16W
R212	NRSA02J-471	M.G.RESISTOR	470	1/10W
R213	NRSA02J-471	M.G.RESISTOR	470	1/10W
R214	NRSA02J-471	M.G.RESISTOR	470	1/10W
R215	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R216	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R217	NRSA63J-393	M.G.RESISTOR	39K	1/16W
R218	NRSA63J-394	M.G.RESISTOR	390K	1/16W
R219	NRSA63J-184	M.G.RESISTOR	180K	1/16W
R220	NRSA63J-224	M.G.RESISTOR	220K	1/16W
R221	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R222	NRSA63J-561	M.G.RESISTOR	560	1/16W
R223	NRSA63J-222	M.G.RESISTOR	2.2K	1/16W
R224	NRSA63J-153	M.G.RESISTOR	15K	1/16W
R225	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R226	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R227	NRSA63J-472	M.G.RESISTOR	4.7K	1/16W
R228	NRSA02J-151	M.G.RESISTOR	150	1/10W
R229	NRSA02J-561	M.G.RESISTOR	560	1/10W
R230	NRSA63J-564	M.G.RESISTOR	560K	1/16W
R231	NRSA63J-104	M.G.RESISTOR	100K	1/16W
R232	NRSA63J-564	M.G.RESISTOR	560K	1/16W
R233	NRSA63J-563	M.G.RESISTOR	56K	1/16W
R234	NRSA63J-563	M.G.RESISTOR	56K	1/16W
R235	NRSA63J-563	M.G.RESISTOR	56K	1/16W

5.7 TER BOARD ASSEMBLY PARTS LIST [0][7]

SCK2408-02-N0A (TK-C600U)

SCK2408-02-P0A (TK-C600E) [0][7]□□□□□□

Symbol No.	Part No.	Part Name	Description
R236	NRSA63J-562	M.G.RESISTOR	5.6K 1/16W
R237	NRSA63J-103	M.G.RESISTOR	10K 1/16W
R238	NRSA63J-472	M.G.RESISTOR	4.7K 1/16W
R239	NRSA63J-472	M.G.RESISTOR	4.7K 1/16W
R240	NRSA63J-333	M.G.RESISTOR	33K 1/16W
R241	NRSA63J-225	M.G.RESISTOR	2.2M 1/16W
R242	NRSA63J-393	M.G.RESISTOR	39K 1/16W
R243	NRSA63J-223	M.G.RESISTOR	22K 1/16W
R244	NRSA63J-123	M.G.RESISTOR	12K 1/16W
R245	NRSA63J-562	M.G.RESISTOR	5.6K 1/16W
R246	NRSA63J-103	M.G.RESISTOR	10K 1/16W
R247	NRSA63J-472	M.G.RESISTOR	4.7K 1/16W
R251	NRSA63J-223	M.G.RESISTOR	22K 1/16W
R252	NRSA63J-223	M.G.RESISTOR	22K 1/16W
R253	NRSA63J-223	M.G.RESISTOR	22K 1/16W
R254	NRSA63J-0R0	M.G.RESISTOR	0 1/16W
C201	NEA11HM-106	E.CAPACITOR	10 50V
C202	NCB21HK-102	CER.CAPACITOR	1000P 50V
C203	NCB21HK-473	CER.CAPACITOR	0.047 50V
C204	NEF11CM-105	TAN.CAPACITOR	1.0 16V
C205	NEF11AM-225	TAN.CAPACITOR	2.2 10V
C206	NCB21HK-102	CER.CAPACITOR	1000P 50V
C207	NCB21HK-223	CER.CAPACITOR	0.022 50V
C208	NCT03CH-271	CER.CAPACITOR	270P 50V
C209	NCT03CH-821	CER.CAPACITOR	820P 50V
C210	NEF10JM-226	TAN.CAPACITOR	22 6.3V
C211	NCB21HK-102	CER.CAPACITOR	1000P 50V
C212	NCB21HK-473	CER.CAPACITOR	0.047 50V
C213	NCB21HK-473	CER.CAPACITOR	0.047 50V
C214	NCB21HK-103	CER.CAPACITOR	0.010 50V
C215	NCB21HK-103	CER.CAPACITOR	0.010 50V
C216	NCB21EK-104	CER.CAPACITOR	0.10 25V
C217	NCB21EK-104	CER.CAPACITOR	0.10 25V
C218	NCB21EK-104	CER.CAPACITOR	0.10 25V
C219	NCB21EK-393	CER.CAPACITOR	0.039 25V
C221	NCB21HK-103	CER.CAPACITOR	0.010 50V
C222	NCB21EK-393	CER.CAPACITOR	0.039 25V
C223	NEN10JM-106	E.CAPACITOR	10 6.3V
C224	NEN11EM-475	E.CAPACITOR	4.7 25V
C230	NEF11CM-106	TAN.CAPACITOR	10 16V

Symbol No.	Part No.	Part Name	Description
D301	HZS27JB2	ZENER DIODE	HITACHI
D302	HZS27JB2	ZENER DIODE	HITACHI
LD301	SEL2310G	LED(GREEN)	
R301	QRD161J-102	CARBON RESISTOR	1.0K 1/6W
R302	QRD161J-682	CARBON RESISTOR	6.8K 1/6W
R303	QRD161J-472	CARBON RESISTOR	4.7K 1/6W
R304	QRD161J-222	CARBON RESISTOR	2.2K 1/6W
R305	QRD161J-0R0	CARBON RESISTOR	0 1/6W
R306	QRD161J-103	CARBON RESISTOR	10K 1/6W
R307	QRD161J-103	CARBON RESISTOR	10K 1/6W
R308	QRD161J-103	CARBON RESISTOR	10K 1/6W
R309	QRD161J-0R0	CARBON RESISTOR	0 1/6W
R310	QRD161J-0R0	CARBON RESISTOR	0 1/6W
R311	QRD161J-0R0	CARBON RESISTOR	0 1/6W
R312	QRD161J-822	CARBON RESISTOR	8.2K 1/6W
R313	QRD161J-822	CARBON RESISTOR	8.2K 1/6W
R314	QRD161J-222	CARBON RESISTOR	2.2K 1/6W
R315	QRD161J-0R0	CARBON RESISTOR	0 1/6W
VR301	QVPC406-103	TRIM.RESISTOR	10K GAIN
VR302	QVPC406-103	TRIM.RESISTOR	10K V PHASE
C301	QCZ0206-104	CER.CAPACITOR	0.10
SW301	SCV2521-001	DIP SWITCH	
CN301	SCV2447-018	CONNECTOR	18-PIN
VA301	ERZ-C03DK820	SURGE ARRESTER	MATSUSHITA
VA302	ERZ-C03DK820	SURGE ARRESTER	MATSUSHITA

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5.8 TER BOARD ASSEMBLY PARTS LIST [0][8]

SCK2405-02-P0A (TK-C601EG) [0][8]□□□□□□□

Symbol No.	Part No.	Part Name	Description
D301	HZS27JB2	ZENER DIODE	HITACHI
D302	HZS27JB2	ZENER DIODE	HITACHI
LD301	SEL2310G	LED(GREEN)	
R301	QRD161J-102	CARBON RESISTOR	1.0K 1/6W
R302	QRD161J-682	CARBON RESISTOR	6.8K 1/6W
R303	QRD161J-472	CARBON RESISTOR	4.7K 1/6W
R304	QRD161J-222	CARBON RESISTOR	2.2K 1/6W
R305	QRD161J-0R0	CARBON RESISTOR	0 1/6W
R306	QRD161J-103	CARBON RESISTOR	10K 1/6W
R307	QRD161J-103	CARBON RESISTOR	10K 1/6W
R308	QRD161J-103	CARBON RESISTOR	10K 1/6W
R309	QRD161J-0R0	CARBON RESISTOR	0 1/6W
R312	QRD161J-822	CARBON RESISTOR	8.2K 1/6W
R313	QRD161J-822	CARBON RESISTOR	8.2K 1/6W
R314	QRD161J-222	CARBON RESISTOR	2.2K 1/6W
VR301	QVPC406-103	TRIM.RESISTOR	10K GAIN
VR302	QVPC406-103	TRIM.RESISTOR	10K V PHASE
C301	QCZ0206-104	CER.CAPACITOR	0.10
SW301	SCV2521-001	DIP SWITCH	
CN301	SCV2447-018	CONNECTOR	18-PIN

5.9 EE BOARD ASSEMBLY PARTS LIST [0][9]

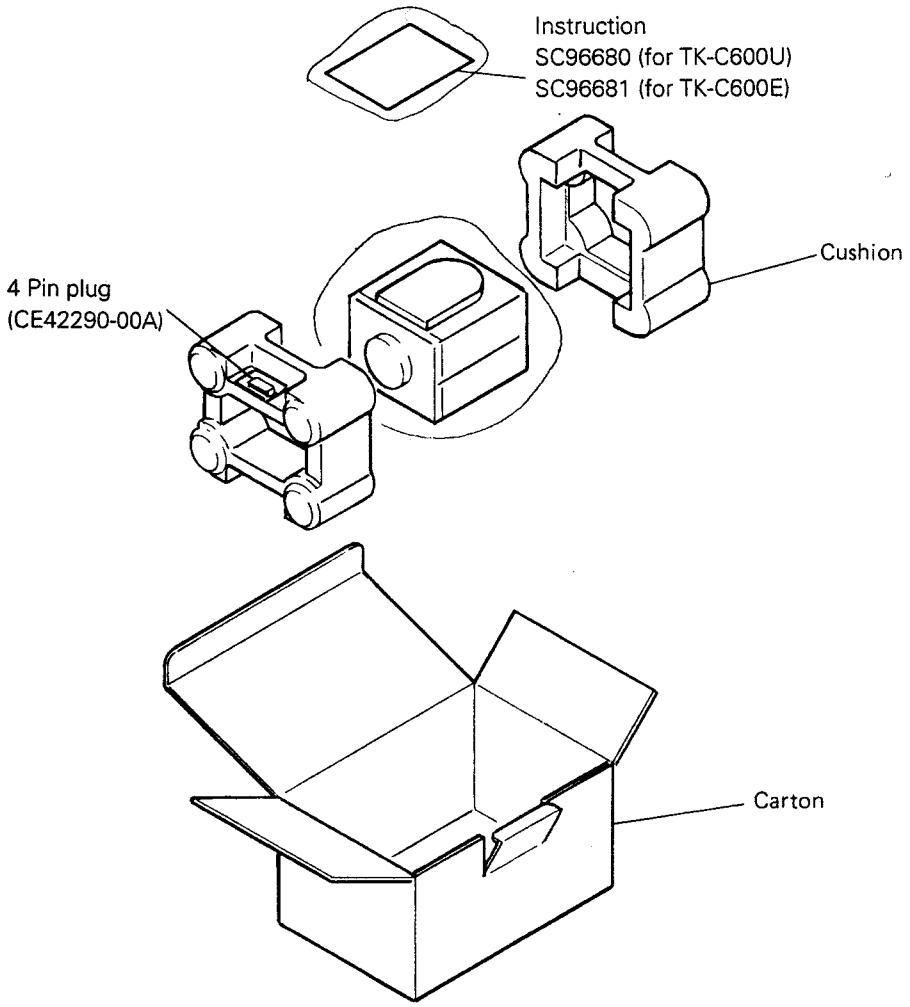
SCK2409-01-00A (TK-C600)

SCK2406-01-00A (TK-C601EG) [0][9]□□□□□□□

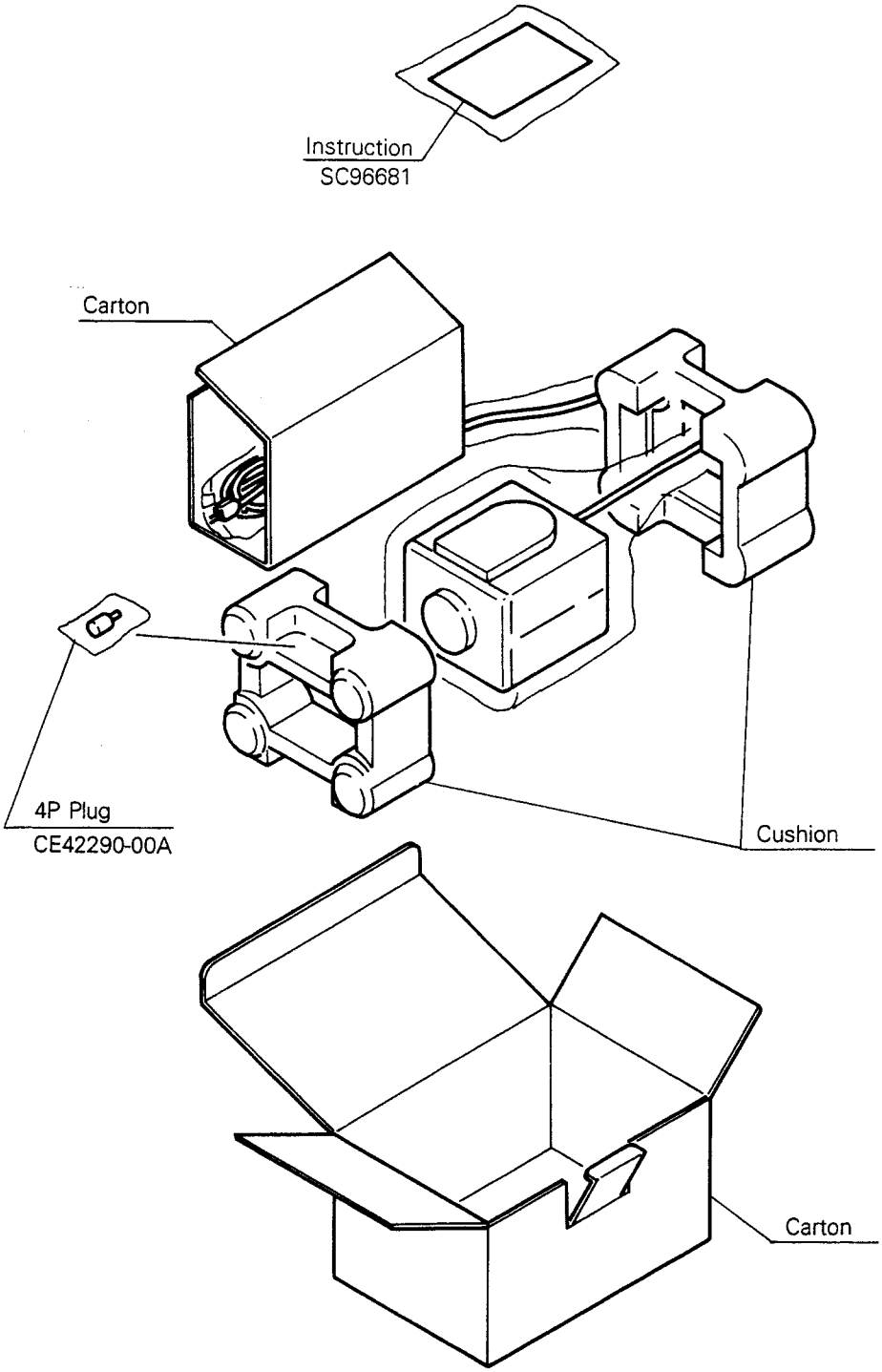
Symbol No.	Part No.	Part Name	Description
IC401	NJM2904M	I.C.(M)	JRC
Q401	2SB1218A(RS)	TRANSISTOR	MATSUSHITA
Q402	2SD1819A(RS)	TRANSISTOR	MATSUSHITA
Q403	2SD1819A(RS)	TRANSISTOR	MATSUSHITA
Q405	2SD1819A(RS)	TRANSISTOR	MATSUSHITA
D401	MA3240(M)	ZENER DIODE	MATSUSHITA
D402	MA3240(M)	ZENER DIODE	MATSUSHITA
D403	MA3240(M)	ZENER DIODE	MATSUSHITA
R401	NRSA63J-102	M.G.RESISTOR	1.0K 1/16W
R402	NRSA63J-0R0	M.G.RESISTOR	0 1/16W
R403	NRSA63J-563	M.G.RESISTOR	56K 1/16W
R404	NRSA63J-223	M.G.RESISTOR	22K 1/16W
R405	NRSA63J-223	M.G.RESISTOR	22K 1/16W
R406	NRSA63J-0R0	M.G.RESISTOR	0 1/16W
R407	NRSA63J-104	M.G.RESISTOR	100K 1/16W
R408	NRSA63J-221	M.G.RESISTOR	220 1/16W
R410	NRSA63J-393	M.G.RESISTOR	39K 1/16W
R411	NRSA63J-392	M.G.RESISTOR	3.9K 1/16W
R412	NRSA63J-222	M.G.RESISTOR	2.2K 1/16W
R413	NRSA63J-102	M.G.RESISTOR	1.0K 1/16W
R414	NRSA63J-823	M.G.RESISTOR	82K 1/16W
R415	NRSA63J-823	M.G.RESISTOR	82K 1/16W
R416	NRSA63J-103	M.G.RESISTOR	10K 1/16W
R417	NRSA63J-471	M.G.RESISTOR	470 1/16W
R418	NRSA63J-471	M.G.RESISTOR	470 1/16W
R419	NRSA63J-820	M.G.RESISTOR	82 1/16W
R421	NRSA63J-470	M.G.RESISTOR	47 1/16W
R422	NRSA63J-470	M.G.RESISTOR	47 1/16W
VR401	QVPB609-103	TRIM.RESISTOR	10K ALC LEVEL
C401	NEE21CM-105	TAN.CAPACITOR	1.0 16V
C402	NEE11CM-226	TAN.CAPACITOR	22 16V
C403	NEE10JM-336	TAN.CAPACITOR	33 6.3V
C404	NEF11AM-475	TAN.CAPACITOR	4.7 10V
C405	NEE21CM-105	TAN.CAPACITOR	1.0 16V
C406	NCB21HK-473	CER.CAPACITOR	0.047 50V
C407	NCB21HK-473	CER.CAPACITOR	0.047 50V
C408	NCB21HK-102	CER.CAPACITOR	1000P 50V
C409	NCT03CH-101	CER.CAPACITOR	100P 50V
C410	NCT03CH-470	CER.CAPACITOR	47P 50V
C411	NCT03CH-470	CER.CAPACITOR	47P 50V
C412	NCT03CH-470	CER.CAPACITOR	47P 50V
C413	NCT03CH-470	CER.CAPACITOR	47P 50V
L401	SSV1330-150	COIL	15μH
J401	SCV2101-001	CONNECTOR	4-PIN
CN401	SSV1321-006	CONNECTOR	6-PIN

SECTION 6
REPACKING

■ **TK-C600**



■ **TK-C601EG**


Instruction
SC96681
Carton
4P Plug
CE42290-00A
Cushion
Carton